This work brings together scientific articles written by the author that have been published in various international reviews, collective books or unpublished documents, not all of which are easily accessible either in Cambodia or in Western countries. The decision to compile these works in this formal edition in English was taken in view of the absence of easily accessible documentary material for those who want to know more about Cambodian heritage related to the indigenous populations. An academic perspective is preserved.

The knowledge that emerged and is presented here reflects what can be called part of the cultural memory of the indigenous populations, specifically the Tampuan of Ratanakiri. This does not mean however that these ethnographic data are confined to a static and forgotten history with no link to the current dynamic situation. A proper understanding of the social dynamic is needed if we are to know how and under what circumstances vernacular societies may be in a position to negotiate with outsiders and various development actors who interact with them. Whatever the purposes and the objectives of the projects and their numerous implementation strategies, a prerequisite is to understand before acting.

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Frédéric Bourdier

The Mountain of Precious Stones

The Mountain of Precious Stones

Essays in Social Anthropology

FRÉDÉRIC BOURDIER

Anthropology

The Mountain of Precious Stones

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Introduction

THE AIM OF THIS BOOK IS TO BRING TOGETHER SCIENTIFIC ARTICLES that I have already published in various international reviews, collective books and documents, not all of which are easily accessible either in Cambodia or in Western countries. The decision to compile them in this formal edition in English was basically taken in view of the absence of widely published documentary material accessible to those who want to know more about the Cambodian heritage of the indigenous populations. This research has not been revised so that it would reflect the confused situation currently prevailing in Ratanakiri; rather, I have resolved to leave the writings nearly unchanged, that is, as they were published between 1995 and 1998 and the raw material as it was collected in the north-eastern province between 1994 and 1996. The reader should therefore be aware that facts and figures presented and analyzed in the following chapters, to a certain extent, belong to a recent past. Many changes have taken place and a second, collective book, which is now in preparation, will be concerned with them.

I have decided in this book to remain faithful to the academic perspective initiated during my two years of fieldwork. The knowledge that emerged and is presented here reflects what can be called part of the cultural memory of the indigenous populations, specifically the Tampuan of Ratanakiri. More than ever before, other than the necessity to focus on the social changes at work, it appears indispensable to record the cultural diversity of the people of the forest whose modes of knowledge, know-how and techniques regarding nature belong to the memory of human history. This does not mean however that these ethnographic data are confined to a forgotten history and have no link with the actual changing situation. A proper understanding of the social dynamics is needed if we are to know how and under what circumstances vernacular societies may be in a position to negotiate with outsiders and numerous development actors who are interacting with them. Whatever the purposes and the objectives of the projects and implementation strategies, a prerequisite is to understand before acting.

I do not claim to provide information that is sufficient or that could be taken for granted before starting to evaluate what should or not should not be done, without having first established a partnership between development actors and local indigenous populations. The scope of my investigation remains incomplete and restricted to a few specific topics (the organization of village structure, relationships between natural and social ecosystems, cosmology and perception of land, rationalities related to slash-and-burn cultivation, historical ethnic interactions). The chosen subjects do however make sense in themselves. One has to remember that demonstrating interconnections among apparently different components of a given culture is in itself

the preliminary step of the anthropologist. A society does not function in terms of isolated factors or indicators. The purpose of social science is precisely to establish links and - whenever the case - to demonstrate their close interdependence. One example: a common trend among some agents working towards social or material changes, for what is generally called the "benefit of society", is to distinguish – sometimes arbitrarily – "good" points in the society, which are to be taken into account, and "more ambivalent" factors, which should be removed because they appear either bad or superstitious and emerge from deeply irrational ways of thinking.

In fact, in making such dichotomous statements, there is the danger that our own categories of perceiving the world are projected and transferred to "good practices" (a key concept that is over-used in the language of international developers) that are liable to be taken as a model. Misunderstandings are rampant and each ethnographer faces them. I remember, for example, that five years ago I tried to ask a question of a person who conducted ritual ceremonies in a Wayãmpi village, in North Amazon: Why did he use modern pharmaceutical pills, but nevertheless maintain contact with the spirit of the animal meant to provide the definitive cure? He amicably replied that he understood the point of my question because he knew that I did not chance to belong to the forest (where the real men live). But he was not in a position to give a proper response because I came with my own categories and classifications and did not yet know the extent to which the forest was a living creature. Could I understand the relation between the soul of this particular animal and man's intimate link with nature? According to him, I had already decided, probably unconsciously, what the orientation of the answer should be, what I expected. He kindly suggested that I wait a little and gain a better understanding of his world and of the functioning of nature in general, and come back with an adequate question.

The book is divided into eight chapters. The first one deals with some of the multifarious interactions that a population maintains with its environment, with space and time. Kinship relations that form the basis of social, economic, political and ritual organization will not be taken up as such, but are seen in connection with the forms of socio-territorial organization on the basis of which the modes of management of the natural environment develop. Whereas American theories of anthropological ecology put forward a determinist explanation and maintain that societal and cultural phenomena are closely conditioned by the natural milieu, our hypothesis advances rather the opposite: the way in which societies organize themselves and how they think and make use of the natural environment shapes it to a large extent. Social ecosystems can in no case be simply considered as by-products of natural ecosystems. Our argument is supported by the example of the Tampuan society practicing slash-and-burn agriculture. This group, comprising nearly 15,000 people, lives for the greater part in the tropical forests of the rich plateaus between the Sesan and the Srae

Pok Rivers. They have learned through centuries of experience to master their environment by succeeding in cultivating what is necessary for their survival, while taking what they need from nature (medicinal plants, extractive activities, etc.) and recognizing the limits of what can possibly be extracted from the natural environment. Thus, numerous prohibitions of a symbolic nature impose socially a frugal mode of management of the space surrounding them. Apparently rudimentary technical knowledge, which is in reality extremely rich, also bears witness to a dexterity and know-how remarkably adapted to the environment. Moreover, it appears to be clear that the use of a technology reduced to its minimum, by way of choice and not a constraint of civilization, curbs excessive reliance on the products of nature and also contributes to the maintenance of equilibrium between social and natural ecosystems.

The second chapter examines the social representation pertaining to nature and its related cosmology as constructed by the Tampuan and other indigenous groups. Connected from an early date with their territory, the indigenous peoples have come to know their natural environment and its resources and can assess periods appropriate for, and the limits of, their exploitation. Although rice is a nutritive plant par excellence, the forest and cleared areas provide many other food products, as well as those for medicinal, domestic and other uses. It appears, however, that modes of management of forest space are not exclusively governed by utilitarian reasoning, that is, only by the necessity of human adaptation to a restricting environment: the techniques in the exploitation of nature are inseparable from their forms of representation. Thus, the manner in which native populations use their environment is directly dependent on the ideas they have regarding themselves, their physical environment and their intervention in the latter. An approach that brings into relief the association of the characteristics of social and spatial organization, of religion, the level of technical development and of cultural practices, enables one to better define the categories particular to the actors and, in the second place, to determine if a distinctive type of traditional management of space is reconcilable with the imperatives of economic development and with the necessity to protect the ecosystem of the forest.

The third chapter focuses on health issues in conjunction with social organization. Only a very few NGOs are involved in the region (until 1994) and the Cambodian government faces a number of complications in providing proper health and social infrastructures. The health situation is one of the poorest in Cambodia: malaria (*vivax* and *falciparum*), typhoid fever, Japanese encephalitis, pneumonia and leprosy are the most dreadful endemic diseases in the tribal villages. The infant mortality rate, even if not exactly available, is desperately high and the health delivery system is restricted to the provincial hospital in the capital and to small dispensaries located in the eight districts and run by under-equipped paramedical staff who suffer from a permanent shortage of drugs. The dispersion of the hamlets and the inadequacy of

mobile health workers also prevent the improvement of the general living conditions. The indigenous population scattered in the semi-deciduous forest in groups of twenty to sixty nuclear families has developed an intimate relation with the environment. Women play a major role in the various activities connected with itinerant agriculture and with the gathering of forest products. They are more precocious and harder workers than men (who mostly hunt, fish and undertake the difficult physical activities), in the sense that they are responsible for the maintenance and supervision of work in the fields and go regularly in the forest to gather various products. They collect firewood and water, take care of the animals living in the village (pigs, hens, buffaloes and dogs) and have to cope with all the traditional domestic duties. The living conditions of women entail exposure to a large number of diseases. In the most remote areas, goitre is endemic and a low nutritional status is rampant, although there would be no regular food scarcity in the communities. Pregnant women have no opportunity to slacken their daily activities, they are bound to start to work as usual just after delivery and, in case of any health problems, men will hardly stand in for them and perform female activities. An understanding of gender and environmental relations is therefore an important issue in the promotion of social changes and in improving the health and awareness of the women belonging to the different Austronesian and Austro-Asiatic ethnic groups in Ratanakiri.

The fourth chapter provides more details on the intimate relation between the Tampuan and their natural environment, when confronted with external development issues. The traditional modes of spatial management, the techniques of making use of nature and the means implemented to procure forest products are the reflection of a particular cultural outlook and perception of the native groups. A detailed observation of the daily practices demonstrates the importance of socio-cultural factors in the management of the environment on the basis of a few specific examples: the practice of slash-and-burn agriculture and the strictly codified use of the forest. It cannot be denied that the "know-how", empirical knowledge, plant taxonomies and the use of the natural environment are closely linked with magico-religious conceptions, with belief in ancestors and in numerous spirits of the forest. However, these social representations are not static and can be open to modification, change and adaptation through a dynamics inherent in the society, as well as through extraneous dynamics, in this case imposed by the government and, recently, by international agencies. Sensitive questions emerge in this context. One might ask how the different social logics of those who promote a so-called development and the local populations are to be reconciled. More precisely, how can one recognize and respect the values of a society that until now has been able to maintain a certain equilibrium with its surrounding environment, and at the same time carry through imperatives of socio-economic development supposed to "improve the lot" of the people of the forest? Finally, a community development project managed by an international NGO will illustrate the hazards and the mixed results of a development operation that, while demonstrating good intentions, did not understand or evaluate the viability of indigenous conceptions.

The fifth part concentrates on interactions between the Khmer and indigenous people. Contrary to the generally accepted idea, relations between the Khmer and the native groups from Ratanakiri have a long history. Recent events during the past twenty-five years have changed regional features and accelerated the process of social change. The period of insecurity, in which international armed conflict, guerrillas, the advent of the Khmer Rouge and very diverse political systems followed one after the other, inevitably disrupted and challenged a number of traditional points of reference. There is no doubt that the memory of the forest people remains deeply scarred, as does that of Cambodia as a whole. However, the cultural content of an ethnic group can nevertheless change without weakening its identity. It should be noted that, in 1995, the persistence of social structures and mechanisms of solidarity such as existed twenty years ago, despite the trauma of the past, contributed new values, such as adhesion to Khmer lifestyles and the introduction of a monetary economy. Each group integrates new elements and asserts its new identity through its relations to other human groups; it redefines its socio-cultural boundaries by mechanisms of exclusion (reference to clan or lineage, delimitation of territory) and inclusion (mixed marriages, generalization of forms of sociability between the ethnic groups of the province) with the surrounding populations, and eventually reinforces a number of its particularities employed as cultural markers (consumption of rice beer, dream interpretation, ceremonies for ancestors, slash-and-burn agriculture). Not to take account of this capacity of innovation and symbolic manipulation of cultural referents is to disregard the dynamic and creative dimension of the forest societies, which are well and truly societies in the process of constant renewal. It is, moreover - in 1994 - inadequate to evoke the loss of identity and the acculturation of the indigenous populations of the north-eastern part of Cambodia. These populations indeed exist in the flesh and, despite overlapping with the Khmer culture, they are able to preserve a specificity which is continually renewed.

The sixth chapter introduces us to the concepts of roots and destiny as they are understood by the native people, mainly through primary (mythologies) and secondary sources. For a long time disregarded by the Khmer and almost ignored by scientists, the indigenous societies of north-east Cambodia have a long history, certain features of which, real or symbolic, have survived thanks to a prodigious oral literature involving epics, legends, factual accounts, genealogical narratives and diverse myths. However, one cannot assimilate the life the people of the forest with a mere substitute

of the past. The rare written testimonies that have come down over the centuries tend to indicate that these representations enriched knowledge through extraneous contributions (from Laotians, Khmer, Chinese), and broadened their geographic and socio-cultural horizons, either through commercial exchanges or by political and ritual alliances, following the example of the relations established between the *Sadets* of the *Jorai* ethnic group and the Khmer kings. There was at the same time the concern to maintain a socio-political autonomy characteristic of stateless societies. Recent history has supported the extraordinary capacity of the ethnic groups to overcome the trauma of the 1970s, to recover a way of life the Khmer Rouge attempted in vain to eradicate, and more recently to adapt a number of their traditions in the context of an intensification of inter-cultural relations. Recent geo-political considerations and the priority accorded to economic development are in the process of modifying socio-cultural phenomena in Ratanakiri.

The seventh chapter introduces us to a more systemic ethno-historical overview of the indigenous population. Very few sources, other than a small number of scattered accounts by explorers and colonial administrators, provide information about the indigenous groups of the high plateaus and the Cambodian mountains. These ethnic groups have, however, played an important role in the foundation and development of the Kingdom of Cambodia, from their participation in the building of Angkor, their alliance and engagement in internal wars, to ritual and symbolic relations maintained for several centuries between the royal power and the three *Sadets* of the Jorai ethnic group. Long perceived as unsociable types with belligerent morals, the Khmers and the Laotians have nevertheless maintained lasting relations of barter and exchange with the indigenous peoples. However, not only marketable commodities were exchanged by way of these contacts; one also exchanged ideas, knowledge and techniques, even though the latter would have seemed rudimentary in the case of the Khmers. Moreover, numerous myths and legends were (and continue to be) circulated among inhabitants of the plains and of the forest, and have fostered more or less consciously a social representation that one group advances respective of the others.

The last chapter attempts to foresee some unpredictable challenges. The indigenous people have now to face a number of unprecedented changes. These transformations take form in the increasing influence of the market economy, the rapid exploitation of the uplands for commercial purposes and government policies that implicitly support these changes and encourage the « Khmerization » of the highlanders by shifting their villages nearer roads, making them practice settled agriculture and trying to integrate them into the modern cash economy. These changes pose severe problems for the future subsistence, security and autonomy of the local communities. If we add the exponential increase of migrants, who take advantage of the lack of strict regulations regarding land access and who do not hesitate to unscrupulously acquire the

forest traditionally used by the highlanders, we can presume that many aspects of indigenous culture, knowledge and wealth are seriously threatened if nothing is done *very quickly* to protect the rights of these people. The most drastic change through the expropriation of forest lands by private commercial interests has already started. Not only will some of the most wonderful primary and secondary forests be destroyed by logging, but the inter-ethnic relations between Khmers and highlanders will be strongly distorted. Different measures have to be implemented to protect the elementary rights of the local people. First of all, they need *citizenship recognition with a special status, acknowledging them as an indigenous population of the land they have historically occupied*, stipulating a particular collective relationship with their environment.

Phnom Penh, 4th December 2006

RATANAKIRI
Siem Reap
Battambang
Kampong Cham
Phnom
Penh
Kampong Som
N
W
E
S
0 25 50 100 Kilometers

N
W
E
S
LAOS
VIETNAM
Taveng
Veun Sai
Stung Treng
Andong Meas
O'Chum
Banlung
Borkeo
Banlung
Lumphat
O'Yadao
Kun Moum
Mondolkiri
0 5 10 20 30
Kilometers

CHAPTER I

Some interactions between a society and its environment

Knowledge and practices of traditional management of nature in a forest area in Cambodia

Phnom Penh, July 1995

IN OUR INITIAL PROJECT, WRITTEN IN JANUARY 1994, we envisioned analyzing practices of traditional management of space, focusing on social representation of the environment in three regions of Cambodia. Each area of study was to present an original ecosystem (milieu of the plains, coastal biotope and forest highlands) and serve as a basis for inter-regional comparison.

In addition to the enormity and breadth of such a work, political conditions, instability, and the continuation of guerrilla warfare during our trip did not allow us to work in the three locations as foreseen. We thus gravitated to Ratanakiri province in the northeast of the country, located more then 600 kilometers from Phnom Penh. This region of forests is one of the few areas that has not been mined and where relative security reigns. It is a milieu incorrectly considered to be mountainous but which, in reality, corresponds to a zone of low plateaus and plains. Apart from Jean Fontanel's thesis [1967] on the natural milieu and the work of Jacqueline Matras [1967-1968, published in 1983] on cultural and ritual practices in a small indigenous village, there has been no study of human geography or anthropology providing a general view of the province until the present endeavor.

Our contribution to the study of links between social ecosystems and natural ecosystems on the central plateau of Ratanakiri has as its modest aim to fill in a little of the scientific void regarding a region of considerable social and economic importance. The *khet* (province) of Ratanakiri is one of the most important natural reservoirs of dense and open forests in the country. It has a surplus of lands that are among the richest in the country, not to mention numerous under-exploited (gold, zircon) and unexploited (lead sulfur, copper, rubies, sapphires, etc.) natural resources. The populations inhabiting this territory are, for the most part, unknown and uncounted by a government that is not disposed to conduct accurate research as to their number or spatial and ethnic distribution, and that ignores almost totally the relations the indigenous people maintain with their natural milieu. At a time when a pioneering effort has begun, when the authorities manifest an intention to change the traditional manner of developing space, without thinking about the effects of such a project (environmental implications, consequences on the living conditions of the people), it is urgent to examine the knowledge transmitted by land-clearing populations, even if only to associate them with future development programs. We will address this problem by giving a special place to vernacular knowledge and techniques for utilizing nature, studying in detail the different practices concerning swidden agriculture.

Social science research being barely embryonic in Cambodia, we were asked on our arrival by our host institute (the Department of Geography at the University of Phnom Penh) to organize seminars to familiarize young geography professors with research methods, which we did in addition to our fieldwork. We also wished to have Cambodians in the Geography Department participate in our research, an undertaking which seemed normal and necessary to us from an ethical point of view, insofar as none of them had yet had the opportunity to conduct fieldwork. Our appeals to obtain funding for our potential collaborators, who were very interested, were unfortunately not heard, not to say categorically refused.

The present report is, therefore, the result of strictly personal work, and we can only deplore the material impossibility that prevented the participation of Cambodians. We wish to thank the governor of the province for the interest he showed in our work, as well as our first assistant interpreter for having agreed to accompany us under physical conditions that were occasionally quite difficult, while the other field assistants who followed were never able to stay with their work for more than a few days. Mr. Pan Van Day, of Kachac background, who was our guide in the remote areas in the north of the province and whose knowledge of the natural milieu proved to be truly impressive, must also be thanked. Finally, the local people whose lives we interrupted showed us confidence through their hospitality and unconditional friendship. We think especially of the inhabitants of Chon village (Ou Chum District), home of the Tampuan ethnic group, who took us in for several months. It is to them that our work is dedicated, with the hope that we do not betray their words and acts, that we have transcribed here.

Finally, Christophe Laborde, head of the AUPELF office in Phnom Penh, graciously provided us with an office during our visits in the capital and always spontaneously and as far as possible responded to our various requests. To him also our warm gratitude.

Problematics: objective, theoretical position, hypothesis and methodology

Objective

The objective of our research is to show the creativity involved in the way a culture socializes nature. Our postulate is that there are not one but several ways of domesticating the environment, and that these ways do not necessarily stem from the constraints imposed by the physical milieu.

The present work is a description and analysis of the technical and symbolic relations the populations of Ratanakiri province maintain with their natural milieu. The objective is to show the interweaving of social structures and practices of traditional management of the environment. We consider that these two parameters - social ecosystem and natural ecosystem - are included in a general system in which the modification of

one entails modification of the other. Similarly, the objective is to reveal the existence of a true vernacular knowledge of the surrounding milieu, without undertaking here a systematic analysis that would necessitate further investigations.

The long-term objective would be to understand the viability of land-clearing practices and other methods of managing nature practiced in Ratanakiri. It goes without saying that a ten-month study cannot accomplish such ends. In order to achieve this, a more in-depth analysis would have to present a double movement in directions that are not contradictory but complementary. The separation of these two aspects of a single reality would serve only methodological and explanatory ends, the framework of which could constitute the basis for later studies, including:

1) research on symbolic forms of the representation of space (mental aspects). This concerns knowledge of myths, modes of vernacular classification, taxonomical systems and magical and ritual techniques.

2) research on empirically verifiable recurrent series with statistical tools (physical aspects). The analysis of energy flows requires a rigorous quantification of the production of land clearers' fields and the work time.

Theoretical positions

The viability of agroforestry can be understood only in its totality, that is, not only by the techniques and production it exhibits at a particular moment in its history, but by all of the symbolic and material relations that come into play in the process of domesticating nature.

We begin with the idea of Claude Levi-Strauss and Maurice Godelier that the comprehension of social logics is necessarily accompanied by a study of material and intellectual methods of socializing nature. The ecology of a society appears as a social fact fully synthesizing economic, religious, and technical elements through "a method of combination, the deep structure of which is isomorphic with other structures regulating the social totality" [Descola 1986].

The theme studied is similar to that of the socialization of nature. The latter is ordinarily perceived in two ways: either as nature animated by society, or nature as a group of phenomena realized outside human activity, outside the human mode of producing space. Two principal theoretical tendencies result from this. The first, that of ecological anthropology, postulates a totalizing determination of society by the environment. Societies adapt to the milieu, and the latter supposedly determines life styles. It underscores the naturalizing work of nature, while culture is only an epiphenomenon. This is a utilitarian interpretation [strongly criticized by Marshall Sahlins 1980], denying any determining feature to the symbolic and social field. The second theoretical position conceives of nature as an object of the practice of thought, as "privileged material from which the taxonomic and cosmological imagination of forest people takes flight" [Levi-

Strauss 1961]. The attention given to the milieu is thus a methodological precaution necessary for rigorously taking into account the internal organization of systems of representation. Nature and its use are invoked as demonstrative auxiliaries of the main enterprise, namely, the semiology of indigenous discourse.

In the first case, practice is almost exclusively reduced to the necessity of adaptation. In the other, it is reduced to pure rational speculation, and practice intervenes only as one of the means for deciphering types of codified discourse (myth, taxonomy). Now, techniques of using the body, nature and space are often bearers of an extremely rich symbolism that does not necessarily appear in normative ideological productions, the usual purpose of which is precisely to give an explanation. A society does not necessarily have a coherent system for explaining the world: it must "improvise" in order to find it.

Hypothesis

Our hypothesis is that the modalities of relations between humans and their environment are not univocal. To say this in another way, they do not respond to strictly adaptive criteria. As Georges Condominas notes, the ecosystem supplies basic data for the existence of the group. The means which the latter avail of to exploit it are also essential, but are no longer a matter of ecology, but of culture. What is more, the relations between culture and environment are reciprocal. The ideal would be to account for the totality of social relations, to take into account the relations that humans form among themselves, in particular those that organize the forms of access to resources and the modality of their utilization. But a detailed analysis of the social structure does not have its place here. We focus particularly on the conditions of access to natural resources and the manner of exploiting them within a determined social space.

By social space we mean to define, according to the terminology of Georges Condominas, the ensemble of systems of relations characteristic of a given group. For the purposes of our study, we more particularly examine the relations a population maintains with its environment, with space and time. The kinship ties that form the basis of social, economic, political and ritual organization will not be considered in themselves but will be linked with forms of socio-territorial organization, on the basis of which the ways of managing the natural milieu are developed. On the other hand, methods of exchange and goods, communications (language and writing) and vicinity are avoided. The indigenous populations of Ratanakiri, who evolve in a system of relations with little variation, are considered to have "*restricted social spaces.*" This does not mean their systems of relations are simple, but suggests only that the space determined by this system of relations remains geographically and socially limited, even if certain villages now have access to the provincial capital and are ostensibly turning towards a market economy.

Methodology

We undertake in this paper successively to describe space and climate from a classical point of view, while integrating forms of local comprehension into each. From this data, we see how the populations view their physical and surrounding milieu, and how they use it. Finally, we discuss techniques used in agricultural practices.

First, a clarification of the present national situation is indispensable in order better to understand the subject under consideration, which involves the problematic of the environment and development. The study will then focus on the province of Ratanakiri. Taking account of socio-cultural and regional diversity, the analysis will be carried out in two parts:

- A global view of the region is offered, although very schematically, in order to account for its variants and invariants and so as not to take as a generality what can be a particularity. Several natural micro-ecosystems in fact exhibit diverse modes of original adaptation. Moreover, various ethnic groups with clearly differentiated life styles in certain regards offer specific ways of managing their environment.
- The second part of the analysis will focus on the numerically largest ethnic group - the Tampuan – who live on the low interfluvial plateau, and more particularly, on their agricultural practices. A detailed description of their land-clearing techniques in connection with their mode of social and environmental organization will be undertaken.

The environment as a vital stake in the Cambodian policy of agricultural development

Cambodia has hardly emerged from twenty years of unrest and isolation (1970-1990: Lon Nol, Pol Pot, Vietnamese annexation). American bombing in the north-east of the country (napalm and defoliants) and the agrarian politics of the preceding regimes, notably under the Khmer Rouge, have resulted in ecological disaster,[1] the consequences of which are still significant in the eastern zone of Ratanakiri. Still today, guerrilla warfare and insecurity continue and seriously impede development policies in numerous regions.

The liabilities of the past are ponderous: social indicators and the standard of living have declined, a fragile ecological equilibrium has been destroyed, many parts of the forests have been converted into waste land, and vast arable lands have been transformed into minefields[2]. After an almost total abolition of government institutions during the first decade after Sihanouk, reconstruction of the country hit full stride thanks to international assistance, the magnitude of which has nowhere else an equivalent.

Since the industrial sector is, so to speak, nonexistent, the country plans to base its development policy on agriculture. This strategy is entirely well-founded, even if human and natural resources still have not been completely documented and no agrar-

ian reform is seriously considered at present. Those involved in development count on the mobilization and participation of rural populations to develop zones that have been scarcely or not at all exploited. The most critical task remains: to clearly and methodically define the conditions for implementing these ambitious objectives.

A diversity of ecosystems is a characteristic of the Cambodian countryside. The Tonle Sap basin and the Mekong plain have four large agricultural-ecological systems covering three quarters of the land area:

- river banks, laid out as polycultural market-gardens (*chamcar)*, on more than 500,000 hectares of fertile and densely-populated land;
- valleys liable to flooding (*beng)* where floating rice grows on 1.5 million hectares;
- high terraces, where pluvial rice is cultivated on poor soils, covering 200,000 hectares;
- the plains of the great lake (Tonle Sap), with rich soils, where primarily floating rice and standing rice are found on 100,000 hectares.

The remaining quarter of the territory consists of insular and coastal agricultural-ecological systems and, above all, of milieus that are incorrectly called "highlands", but which are, in fact, high and low plateaus on which a few rare mountains reach between 1,000 and 1,500 meters. These low altitude zones contain most of the dense forests scattered in the three corners of the country: the Dangrek chain in the north, the Ratanakiri plateau and Chhlong hills in the north-east and east.

Generally, soils are agronomically poor, irrigated areas are extremely reduced, and irrigable land is itself quite limited, in spite of the absurd attempts at agrarian revolution made by the Khmer Rouge regime. Sulfite soils of mediocre quality are characteristic of delta provinces in the south-west. Lands poor in phosphate are found in the inundated plains, while sandy acidic soils resulting from the degradation of sandy massifs are present in the north and central regions. Apart from the rich alkaline soils of Battambang province, the few unused fertile lands are still in wooded areas: black and brown soils around the large lakes, and basaltic red soils that prevail essentially in Kompong Cham (hevea plantation) and in the outlying provinces of Ratanakiri and Mondolkiri. Other than the deforestation problems this implies, their development is difficult because of the uncertain means of communication and the difficulty the peasant masses have in obtaining inputs capable of assuring a regular production without harm to the environment.

The majority of crops in Cambodia are thus dry crops that depend on the monsoon from the south-west, which falls between mid-May and mid-October. However, annual rainfall, which fluctuates on average between 1,000 and 1,500 millimeters, undergoes significant variations in space and time, and certain years have deficits (as in 1994) with grave consequences for rice production.[3] This climatic uncertainty means that Cambodia is not free from food scarcity, notwithstanding international "benevolence."

If natural conditions are far from idyllic, the same holds true for social and political

conditions on the basis of which agricultural and forestry development projects are planned. Outside incantatory discourses promising a harmonious vision of sustainable development and respect for natural ecosystems, everyday reality offers the sad image of a country subject to speculation and short-term profit. Two types of pressure, internal and external, that threaten the ecological environment are to be noted in this regard.

The first constraint is of an international order: the neighboring countries, like those farther away, draw heedlessly from the resources of the country in the absence of any effective control. This lack of supervision is itself surpassed by unbridled local corruption.[4] In addition, as Marc Dufumier (1993) underscores, "it would be futile to imagine being able to defend systems of agricultural production that are most respectful of the ecological environment, without a relative protection of their food-producing agriculture on the international market". Although large-scale imports at low prices from industrialized countries are not yet profuse, and although Cambodia does not yet constitute a priority market for countries of the North, it is nevertheless the case that the sponsors of international funds promoting free exchange influence national politics by imposing structural adjustment programs, the consequences of which are not yet perceptible or, in any case, have not been analyzed.

The second constraint concerns the endogenous application of agricultural development projects. The need for immediate investment favors the illegal sale of wood abroad, notwithstanding the recent prohibition (in the spring of 1995), as well as the implementation of "development" projects without prior evaluation, which turn out to be catastrophic for nature. Let us cite as examples among many others: the increased sedimentation of the Great Lake linked with the accelerated erosion of slope basins; the destruction of mangroves subsequent to the development of aquatic farms in the region of Koh Kong; generalized clearing in order to meet the fuel demand (charcoal), to augment cultivated areas and satisfy the demand for timber, etc.[5] In a similar vein, the foreseen construction of gigantic dams along the Mekong is more than questionable, insofar as these large works[6] risk bringing with them population displacement, a decline in fishing, agricultural pollution, the destruction of local crops and forests and a salinization of delta waters, while giving rise to new epidemiological conditions favorable to the outbreak of certain pathologies (schistosomiasis, malaria, etc.). There is, unfortunately, no reason that errors committed as regards hydraulic constructions in other countries (India, Egypt, etc.) would not have the same consequences here in Cambodia.

Moreover, with the proliferation of NGOs - the majority of which agree in wanting to combine economic development with preservation of the environment - an atomization of agricultural policy is witnessed. The convincing results of some organizations cannot be denied, but the problem lies in selecting favorable zones (which are not always the most underprivileged) at the expense of a generalized development, which would

be the only guarantee of lasting stability in a country that has scarcely emerged from war, and in which community tensions are exacerbated. This array of organizations with diverse competencies gives rise to regional or even micro-regional discrepancies, which themselves generate additional socio-economic disparities and a growing inequality in access to technical innovations. This suggests that the methods and strategies of developing space vary sporadically without the adoption of any long-term planning policy that would be both flexible and uniform. However, taking into account the current situation, it must be recognized that there are scarcely any other alternatives. But it would still be necessary to further reinforce cooperation between humanitarian institutions and the government apparatus and to exercise control over the activities of foreign organizations, whose objectives are sometimes questionable (proselytizing), in order that the country not be considered a laboratory or ground for experimentation where international stakes outweigh local interests.

The extent of natural resources, in particular of wooded areas, is constantly declining. In the 1960s, the government estimated the forest cover to be 74%. At the end of the 1980s, the FAO reduced this figure to 60% (approximately 10 million hectares), while congratulating national performance compared with that of neighboring countries.[7] This way of seeing things is now no longer possible: the percentage of deforestation increases much more significantly in Cambodia than in Vietnam, Thailand, or Laos, and nothing allows one to anticipate a recovery of the situation. What is more, reforestation programs are in an embryonic state, with only 2,100 hectares of planted between 1986 and 1990 (of which only 70% survived). By 1995, no more than 30% to 35% of wooded area will remain, according to sources at the Ministry of the Environment. At this rate of destruction, the total forest ecosystem is theoretically threatened with extinction, apart from a few pockets that are being transformed into national parks (the first was inaugurated in May 1995).

Ironically the places that are presently not threatened by deterioration or deforestation are the mined zones, where all human activity is prohibited. Marginal regions, like Ratanakiri, are not spared intemperate clearing. Disregarding recent agronomic expertise, foreign investors (Malaysian and Japanese) desiring to create oil palm plantations and private speculators knock at the door of provincial governors, putting pressure on them in order to obtain concessions on lands traditionally used by land-clearing populations. At the same time, these peasants in the forests are accused of destroying nature, whereas they are really the main protectors, as we will see in the following.

Table 1: Tendency towards deforestation by province

Provinces	% of forest cover (1960)	% of forest cover (end of 1980)
Virtually intact:		
Koh Kong-Mondolkiri	90	90
Stung Treng-Preah Vihear	90	85
Kratie	90	85
Pursat, Siem Reap, Battambang	55-60	55-60
Kompong Thom	55-60	55-60
Moderately severe:		
Ratanakiri (severe in 1995)	90	80
Svay Rieng, Prey Veng	10-15	1-5
Very severe :		
Kompong Chhnang	60	1-5
Kompong Cham	60	30
Kandal, Takeo	10-15	0

Source: FAO, Report No. 0/91/E

This incomplete and schematic panorama should call to mind what may seem evident, but what environmental specialists sometimes have difficulty articulating - or at least have a tendency to underestimate - in applied research concerning the ecological feasibility of a development project: the preservation and limitation of tropical ecosystems result above all from political decisions, the logic of which is the result of negotiations between different pressure groups having contradictory and shared interests. Economic issues in Cambodia very often take precedence over considerations of an environmental nature. The first measures to be adopted are legislative measures regarding the protection of the natural environment and the conceptualization of realistic policies of sustainable development. The necessity of introducing viable strategies for rural development appears like a leitmotif between the lines of development projects, but no agrarian reform has until now seen the light of day in Cambodia, while land inequalities are legion and land is being sold off to investors, despite official prohibitions against conceding property titles to foreigners. Is this not rather like filling a bottomless basket?

A regional context: populations/milieus interface in the province of Ratanakiri

"In the time of the Khmer Rouge, one heard from afar the music of the ancestors at the edge of the forest. The sound of the drums resounded and told us of the presence of the old ones, those who do not lie and who know the true words."
(an inhabitant of Lumphat)

Going from the global to the local, we will consider in this section the question of the responsibility of human societies for the more or less damaging management of their environment. Systems of production will be considered together with a cognitive approach towards certain methods of empirical knowledge and phenomena of adaptation by the rural society to its territory. We will concern ourselves primarily with aboriginal populations whose way of life is increasingly menaced, leaving aside the agroforestry activities of non-tribal populations (Khmers, Lao, Chinese and Vietnamese), the analysis of which would merit a separate study.

Data on the milieu and local interpretations

With an area of 12,561 square kilometers, the *khet* (province) of Ratanakiri is located in the extreme north-east of the country, more than 600 kilometers from Phnom Penh. It is bordered on the north by Laos, on the east by Vietnam, on the west by the *khet* of Stung Treng, and on the south by that of Mondolkiri. Such a geopolitical entity, the creation of which is relatively recent (1953), has no equivalent in the vernacular languages, which have no word to designate the region or even to describe the territory inhabited by a particular ethnic group. For each of them, the daily space of life is reduced to the area of the *phum* (village), within which they regularly plant their crops. Beyond this socialized milieu is "elsewhere," the domain of the stranger that is entered only occasionally during large hunts and for visits among a circle of distant kinfolk. What is called village territory is, according to local perception, a relatively well-defined area within which are identified supernatural beings that populate a space sufficiently vast for the members of village to grow and gather the resources necessary for their everyday subsistence. This zone includes grouped settlements, water points, cleared fields and the forest.

The general configuration of the physical milieu is relatively simple. It comprises a vast sedimentary plain that is low, uniform, only slightly undulating and covered with open forest and savannah, in the center of which is a basaltic plateau with an elevation of at least 500 meters, rich in red soils supporting a dense forest and scattered secondary formations evidencing the regeneration of former land clearings and other clearing done by humans.

With the exception of a mountainous barrier north of the Sesan River towards the Laotian border, the region presents no grandiose landscape. The roads of beaten earth that traverse the province from east to west and from the Sesan in the north to the Srae pok in the south demonstrate this topographic uniformity. Only the first foothills of the plateau present slopes of more than a hundred meters - notably those of the so- called parrot's beak on the road from Lumphat. To this can be added some thalwegs - the most representative of which is that of O'Trao, located east of the provincial capital - as well as some hills and inselbergs (*phnom)* scattered here and there, mainly to the east of the

plateau and its edges. The latter is called the Bar Kaev plateau (toponym of the market town) or Tampuan plateau, referring to the dominant ethnic group that inhabits it. It is in the approximate shape of a rectangle, 55 kilometers by 40 kilometers, aligned northwest to south-east. A plethora of small winding waterways (*o'*) have their sources in the heights and flow into one of the two rivers that cross most often transversally the undulating plateau. Numerous resurgences of subterranean streams and perennial springs mark the landscape. Their presence determines the nearby (but never immediately surrounding) establishment of zones of grouped settlement. The slightest rivulet or stream of water, including those that regularly dry up, bears a name that constitutes an essential element in the system of traditional mapping of forest space.

The basaltic plateau results from two phases of volcanic flow.[8] The first, of Hawaiian type, characterized by fluid lava without explosion or projection, has yielded flows more than a dozen meters in thickness covering roughly 200,000 hectares. They are visible above all in the west; where they have accumulated at the foot of granite and granodiorite reliefs. In several places, notably on the road that leads to Ta Veng district, they outcrop in the form of large bare slabs, rough and jointed. The second more recent phase is characterized by explosive flows of the Strombolian and Vulcanian type, evidenced by the presence of rhyolitic tuffs dating from the Quaternary, thus creating two shapes of original construction: simple cones (more than a hundred, according to Jean Fontanel), and vast fields of scoriae. Some of these cones have more or less splayed craters, or even calderas, of which the most typical is that at Yak Lom - three kilometers east of Ban Lung - having given rise to a magnificent lake 800 meters in diameter, more than 80 meters in depth and presenting an almost perfectly circular shape. These remarkable elements of the plateau's relief have drawn the attention of aborigines, for whom most of the inselbergs and other clearly demarcated hill forms have become sacred places, and homes of the spirits of land, waters and forest. These "geo-symbols," considered as points of privileged encounter between the celestial world populated by supernatural entities and the world of humans, are places that are not only uninhabitable by people but also privileged places that are to be protected from human activity, or at least where human activities are to be limited. The broad foothills of these mountains are not however always spared and are subject to temporary clearing and cropping. Agricultural use of the periphery of the *phnom* becomes a means by which human society comes closer to the higher spirits, while showing allegiance by becoming: "guardians" and "masters" of the locality – similar to Phnom Penh Troll in Ta Veng district - in order to obtain in return good harvests, thanks to the benevolence of the spirits. Yak Lom Lake conveys a rich mythology, evoking its genesis and history and describing the fabulous aquatic beings that dwell there. It is said that no permanent human settlement can be established on its banks, just as the surrounding forests cannot be cut because they are the privileged abode of the spirits. The populations neigh-

boring the lake have similarly elaborated a code that limits the withdrawal of fish resources to daily family subsistence by prohibiting any form of speculative fishing.

The plains and valleys, which represent the second element dominating the provincial relief, constitute a much less well-known domain that is little occupied by indigenous populations, who show scarcely any interest in the vast expanses of sparsely wooded areas that, according to them, are unsuitable for land-clearing. Apart from a few villages of Jorai originally from Vietnam (Pleiku), who have practiced irrigated cultivation for many years, it is only since the 1970s that certain aboriginal groups have begun to imitate Khmers by practicing rice cultivation in the herbaceous open spaces adjacent to the lower basins of the Sesan and Srae pok. Unlike the flat sedimentary strata, probably cleared by erosion over the ages, and consequently not very thick, those of the horizontal alluvial valleys (two to three kilometers wide) of the two large rivers that cross the province are an exception. The hydrographic network is very complex: to the south of the Sesan, because of the absence of a slope of more than 1%, the waterways have a poor flow and lose themselves in the numerous backwaters and swamps that attain considerable dimensions during the rainy season. In contrast, farther north, several tributaries (Olalai, Banpong and Khampha) having their source in the mountains of Laos, reveal a more significant flow and cross the deep valleys before joining the Sesan.

The two rivers whose ichthyologic wealth is considerable – the Sesan slightly to the north and the Srae pok more to the south – mark the edges of the plateau and cross the province from east to west, tracing numerous meanderings before flowing into the Sekong tributary of the Mekong in Stung Treng. Their rate of flow is irregular and numerous rapids restrict navigation to fragile wooden *champans.* The flow of the former at Lumphat is 50 m3/sec. during the low-water period in April for a width reduced to less than 100 meters, and is 3,250 m3/sec. in September, with an average width of 350 to 400 meters. That of the Sesan varies from 93 m3/sec., with a width of 100 meters, to 4,176 m3/sec. and a width of 400 to 500 meters. The riverbeds, with changeable depths, are cut in friable formations of ancient alluvium from the plain, but also in weathered rocks from the substratum. The recent alluvia deposited on the banks include a number of varieties of sand – from finer to more gross - as well as clays and silt. It is in this ecosystem of banks with fertile soils generally covered with bamboo that the Lao and more recently the Khmers have settled, while adjoining zones of deciduous trees remain almost uninhabited; the aboriginal populations prefer, for their part, to live beyond the first foothills of the interfluve.

In the previously cited study on the natural milieu of Ratanakiri, Jean Fontanel notes that the plant cover corresponds exactly with certain contour lines or according to changes in geological structure, to such an extent that most of the boundaries between open and dense formations emerge by tracing contour lines or differentiating soil types on the maps. American bombing subsequently modified this equivalence in certain

places (north, east). For the recent period, the types of plant cover and their respective areas were estimated in 1993 by satellite imagery (LANDSAT-MSS and LANDSAT-TM) recorded during the dry season. We note that because of scale (1:250,000) or lack of verification on the ground, among other reasons, the assessment of mangroves along the Sesan and east of Veun Sai, the under-estimation of the area of cleared land, and the conglomeration of cleared zones (sometimes confused with natural savannahs) scarcely correspond to reality. In fact, although the existence of anthropogenic savannahs caused by land clearing cannot be denied, all the savannahs cannot be linked to human activity. Testifying to this are shrubby or wooded savannahs situated on lands pedologically unsuited for agriculture - or at least perceived as such by the Proto-Indo-Chinese.

Table 2: Vegetal and crop cover of Ratanakiri

Designation	Area (km^2)	Designation	Area (km^2)
Town/urban zone	1	Mixed forest	576
Irrigated rice field	117	Secondary forest	724
Crops on the plateau	2	Sparsely wooded forest	470
Slash-and-burn cultivation	231	Natural shrub savannah	79
Plantation	41	Abandoned savannah	126
Crops in the plain	2	Grass savannah	29
Dense forest	6,014	Water	51
Deciduous forest	3,998	Mangrove	0

Source: The Cambodia Land Cover Atlas 1992/1993, Mekong Secretariat, Phnom Penh, 1994.

The forest mantle that covers the territory in an apparently continuous manner conceals a significant variety of soils and relief features: volcanic formations, craters, hills, pediplains, valleys, thalwegs, hilly plateaus and mountains. Red basaltic soils dominate on the plateau. They are deep (10 meters, sometimes more) and appear rich in magnesium and calcium relative to the more shallow clay-sandstone soils of the plains. The autochthonous populations are all conscious of the exceptional value of this red soil and, in addition to settling near bodies of water, as earlier mentioned, determine their settlements and cultivation sites primarily on the potentialities they carefully attribute to each of the soil types encountered in their respective ecosystems.

Land clearers, better than anyone, are conscious of the pedological and morphological diversity of their territory. This knowledge, based on centuries of observation and agricultural experimentation, allows them to carefully distinguish the components of their organic and inorganic environment. It is thus that the Tampuan, a Mon-Khmer speaking group living in the central zone of the plateau, distinguish areas where many trees grow (*yet)* from those having arenaceous surfaces with more or less large rocks

(*mahaouteu, mahaou)*, wooded hills (*pri phnom)* and low mountains (*phnom kate)* from higher mountains (*phnom choeungoi*), fields and grasslands (*srey, unglao*) from marshy lands (*trop)*, narrow valleys from wide alluvial valleys, and sloping terrain (*té charang)* from flat open terrain (*té tamplang).* The characteristics attributed to soils are generally associated with these forms of relief. The principal criteria of vernacular classification refer to color, vegetation, texture, permeability, localization and fertility: *té trop* is land where water stagnates, *té roy* evokes red soil, *té bék* gravelly soil, *té ksad* sandy soil, *té mô* black soil, *yet* soil where only weeds grow, *té lapan* fertile soil, *té rong* land that was previously fertile but is now depleted, and *té paba* land of intermediate quality. As for the Kachac, half of whom are land clearers and half rice cultivators, they distinguish red soil (*kanes jâ)*, black soil (*kanes chagas),* soil in the plains good for rice fields (*kanes sré)*, and fallow land (*kanes sik).* In their agricultural classification, sparsely wooded forest (*parotché)* is not suited for rice fields because of the abundance of savannah-type grassy vegetation but is suitable for irrigated cultivation. In contrast, forests with large trees are the most sought after for land clearing, while other ethnic groups concentrate their cleared land primarily in secondary and mixed forests.

Indigenous nomenclatures of the vegetal mantle show care in detail and specifics. They evidence greater diversity than the abstract scientific generalities inherent in broad categories. Resolutely pragmatic, they rely on the observable, the general shape and stage of maturity, as well as symbolic significance (dwelling of spirits, tree planted by an ancestor, etc.) and potential uses. Certain trees (thorny, large dipterocarparceae) or certain vegetal associations (bamboo stands, grasses for building straw huts, dense thickets) play the role of ecological indicators. Thus, more than forty terms are known just to designate types of forest formations dominating the plateau.

Table 3: Example of vernacular forest typology among the Tampuan (Local designation and translation)

pri they (“forest with large trees”)	dense or mixed forest assimilated to a primary forest
pri la heng (“spaced forest with small trees”)	forest savannah, mixed forest
pri la heng (“spaced forest with large trees”)	same, but with a more significant grassy cover
chiumpar (“former land clearings where trees are growing again”)	forest re-growth still not ready for new cutting
ri ara (“mature forest”)	new secondary forest adequate for land clearing
ri lapant(“forest of compact trees”)	dense forest impenetrable by humans
ri rome (“forest of compact trees for animals”)	forest also impenetrable by animals
ri trop (“forest standing in water”)	swampy forest
ri chiot chiot choraux(“forest that protects the village”)	forest for domestic use surrounding the settlement
pri kiom miir (“forest that protects the miir”)	forest adjacent to the cultivated field
pri tieurk (“forest near the stream”)	humid forest near water
pri poo (“forest of large bamboos”)	bamboo stand
miir choun (“forest regrowth after clearing“)	forest planted by man, hevea plantation
pri chan (“forest of spirits”)	forest whose cutting is strictly forbidden
ro (“forest that will be cut “)	forest reserved for a family who intends to clear it
pri long (“forest of undergrowth”)	forest of natural re-growth
pri phnom (“forest on a hill”)	high forest, often assimilated to primary forest

Source: personal surveys, 1994-1995

Ratanakiri has a tropical monsoon climate characterized by relatively uniform daily temperatures and by the alternation of two very clearly marked seasons: a dry season from December to April with the lowest temperatures in December/January (15º C in the morning) and highest temperatures around 40º C in April, and a rainy season from May to November. The annual rainfall is always above 2,000 millimeters and can reach 2,950 millimeters in certain places (Ban Lung, for example). However, more precise variations, fluctuating according to geographic zone, are found in the traditional divisions of time and seasons elaborated by the various ethnic groups. They have elaborated a model of the annual cycle, beginning approximately at the beginning of December, once the harvests are in. They distinguish a cool season from December to February, and subdivide the entire rainy season into light, average and heavy rains. The dry season is also divided into temperate, hot, and very hot months. Depending on their location, the villagers designate a series of micro-seasons, the actual existence of which is difficult to discern in regional or even district meteorological tables. The general schedule of the monsoon and its changes are also perfectly understood by the ethnic groups, who have established a lunar calendar (*khae* means month as well as moon) that serves as an agro-climatic reference. This calendar opposes not only “dry” moons to “humid” moons, but observes finer distinctions: moons of the monsoon; of cool breezes; of cicadas; of heat storms and of the fires of felled trees during the dry months, moons of persistent rains, of corn, of abundant rains and of early rice during the rainy season. The observation of the moon’s movements is given particular attention: the beginning

of the month (*engkap kor nao koak*) coincides with the appearance of the new moon (*engkap kor nao)*. The waxing period is subdivided into two phases (*khae chankra* and *khae chantoy*) separated by the half-moon (*pastrieng*). Then comes the full moon (*khae wouoleke*), followed by the waning moon (*khae chianti)*. In addition to this is a complex astronomical system in which the appearance of certain constellations - Pleiades, Orion, Aldebaran, and the stars Antares, and Berger - is directly correlated with imminent climatic events. The reference to stars - position, visibility, brightness - influences decision-making concerning the course of the agrarian cycle.

Similarly, like the classification of the Achuar in the Amazon[9], a very clear distinction appears between rain water (*tieurk bay*) and terrestrial water (*tieurk en'gbar te*). For the Tampuan, the first comes from the second, not only through the natural principle of evaporation but as the direct result of human intervention. The arrival of the rains depends on certain behaviors in respect to bodies of water, but even more it is attributed to the process of cosmic fermentation, the metaphorical model of which is provided by the making and consumption of rice beer. Man therefore is in part responsible for the annual renewal of precipitation, insomuch as the inebriation that characterizes large festivals during the dry season is supposed to bring about monsoon rains.

From this briefly sketched representation of nature, a relation unfolds to space and to primordial time. In the first place, the occupation of family fields and settlements (with displacement occurring when epidemics break out or the surrounding lands are exhausted) is not dictated merely by simple human will. One must also show allegiance to the spirits who dwell in the forest, at water points, rocks, hills, trails and village sites. Without the certainty of the "agreement" of supernatural powers (through dreams, sacrifices, prayers), no human action can be undertaken. All the land formations and specific shapes in the landscape bear names that serve not only as landmarks in the geography of places, but also indicate the location of a spirit invoked in prayers and with whom one enters into ritual contact during illness and for any agricultural endeavor or forest use (hunting, fishing, gathering, and cutting wood). Certain sacred places are exempt from any human activity: parcels of forest near villages, on hills and along streams. Among the Brao and Ta Veng, the spirit living on Phnom Proll, which we have already mentioned, required men to defend his dwelling in exchange for his protection of the crops, under threat of his sending lightning in the case of negligence. The villagers, guardians of the place, watch to see that no one digs the ground in search of semi-precious stones (zircon), or fells large trees growing on the hillock. Such traditional systems of protection are found sporadically, but do not lead to the conclusion that this is an ecological behavior, a concept that is, moreover, purely western. There is, indeed, a tendency among the indigenous populations to believe in the unlimited existence of resources, which are perceived as gifts from the gods to humans who regularly perform sacrifices to them. We will show further on that such an attitude, while having little effect in certain very sparsely populated regions of Ratanakiri, can be harmful in zones with a much higher human concentration.

In the second place, the principal markers of spatio-temporal orientation are neither the cardinal points nor, even less, the territorial organization imposed by the Khmers, but rather the location of ancient villages near which are located buried ancestors, abandoned clearings, hunting trails, forest paths between the houses, roads linking the village to the cultivated lands, rocks, original shapes in the relief, thickets in which a named and identified spirit dwells, etc. In the absence of a nearby river, which otherwise plays a role as a major thoroughfare (among the Kachac and the Brao established along the Sesan, for example), most of the land clearers take their bearings from the progress of the sun during the day and that of the moon and other celestial bodies during the night. Others, like the Tampuan, estimate the degree of maturity of the grassy vegetation, the sonorous presence of birds, the flow and changing levels of the streams, the emanation of certain vegetal odors, and learn these manifestations as well as other distinguishing indices of time and space.

Time and space thus appear inseparable, and the division of the day is minutely transcribed in vernacular languages, the terms of which refer to human activity that is preferentially accomplished at a precise moment in a predetermined place. When one is removed from familiar space, however, methods of designation become hazy. Everything outside the universe of everyday praxis, the distance or limit of which varies from five to ten kilometers according to the size of the village, is vaguely designated as "far", "this way" or "that way" without additional specification. Only access to the market in the provincial capital, for villages in a radius of ten to twelve kilometers, tends to modify the geo-centric perception of village space.

Aboriginal populations have constructed a network of spatio-temporal coordinates with several dimensions, combining stages of annual maturity of vegetation, systems of geographic marking and climatic and astrological cycles. In this regard, the observation and knowledge of the movement of the stars is an important characteristic that is found among most of the ethnic groups we visited. Certain stars are grouped together and are identical to western categories (Orion, Pleiades), while others are the product of their own classifications. The annual revolutions of some celestial bodies have fundamental importance, inasmuch as the time they take to complete an entire circuit corresponds to trajectories of various entities such as animals and men (real or mythical). This correspondence, which Claude Levi-Strauss has characterized as a universal rule in mythical thinking in general, has direct implications for the management of time for forest and agricultural activities, in the sense that the position or the particular brightness of a given star is interpreted as a harbinger of a climatic event, in other words, of an agricultural, synergetic or forest activity. This is the case for the Milky Way, which is visible on clear moonless nights, and is blurred when the atmosphere is saturated with humid-

ity, primarily during the rainy season. Its appearance and disappearance, corroborated with the calendar of seasonal natural resources, serves to indicate intervals that pertain to agricultural initiatives, dividing the year into a series of significant periods.

Practical or utilitarian reasoning is not the only motivation for access to knowledge: cosmology and astronomical mythology give rise to many discussions and reveries when, seated under a clear moon, young and old comment on the celestial panorama offered to them, evoking the re-creation of the world by Yang, the demiurge, who sent waters over the land and provoked a flood before giving birth to "true" men. Or, again, when infrequent or exceptional phenomena, such as rainbows and eclipses, become a source of inspiration and of inexhaustible discussions.

The establishment of populations

A long human presence is attested in Ratanakiri by archaeological discoveries, sparse information contained in the royal chronicles and travellers' accounts.[10] Autochthonous populations of the province belong, along with the populations of the upper plateaus of southern Vietnam and Laos, to the cultural group called "Proto-Indo-Chinese." Their social, religious, and cultural affinities have nothing in common with those of the Khmer, Vietnamese and Laotian civilizations surrounding them, and one of their particularities is found especially in their way of thinking about the environment. They are, above all, professional land clearers, occasionally hunters/gatherers and fishermen, who presently represent almost 80% of the total population of the province.

Information concerning the development of the general population is scant and incomplete. However, demographic densities are essential in a study on the environment. No estimation was even advanced by explorers, since it seemed illusory to specify precisely the density of occupation in a territory as so extensive and so poorly known. The census of 1962 records 49,305 inhabitants, which represents a density of only 4.5 inhabitants per kilometer.

Table 4: Population distribution in 1962

District (srok)	Women	Men	Total
Andoung Pich	7,038	7,090	14,128
Veun Sai	8,356	8,668	17,026
Lumpath	8,750	9,402	18,152
Provincial total	24,146	25,160	49,306

Source: cited by J. Fontanel. 1967: according to the Institut national de la statistique et des recherches économiques

These figures are, however, considerably truncated. Detailed verification by Jean Fontanel shows the omission of certain hamlets and a considerable portion of village inhabitants theoretically enumerated. According to estimates by the author, the population would in fact comprise as many as 70,000 to 75,000 people. The immediate period, which is a period of intense political troubles, has incontestably seen a serious population decline, not to mention the escapes and deportations occasioned by pro-American, Khmer Rouge, and then communist, regimes.[11] Twenty years later, the 1980 census, conducted by Vietnamese experts, gave a figure of 56,682 (of whom only five were their compatriots!). The names of the ethnic groups are sometimes confused, which leads to mixed results. The difficulty of going to some settlement zones and the absence of a large part of the families from villages irremediably thwarts the preciseness of the data. In 1989, a report by Georges Difflotth mentions 44,607 inhabitants of indigenous origin.[12] Finally, in 1992, the census carried out by UNTAC gave the presence of 66,764 inhabitants, distributed in nine districts and 243 villages. Our own surveys carried out at the end of 1994 adjust these estimates to 69,599 people, with a few additional villages. Our information was obtained either directly from the heads of the *phum* (village) and of the *khum* (commune), or from those responsible for education in each district charged with updating the number of inhabitants in their jurisdiction every year.

More than the total number, what interests us is the ethnic distribution over the entire territory, to which Table 5 refers. For the sake of convenience, we have taken the district as the basis for reference. First, a comparison with the few investigations conducted in the past is not without value, for it shows that the localization of groups has scarcely changed in a century. The map made by Colonel Cupet[13] in 1890 is the earliest. Its imprecise character does not take away from its pioneering interest; it served, moreover, as a basis for all those that followed. That of Pierre Bitard, administrator of the authority in Veun Sai in the years 1948-1950, is more exact. It is an attempt to inventory all the ethnic groups living over a much greater territory than the present *khet* of Ratanakiri, and was made from various cartographic documents established by the colonial administration. It shows the displacement and dispersion of settlement sites not mentioned on the old maps. For example, a good number of villages formerly north of the Sesan were moved to the south, or no longer exist. But on the whole, the spatial distribution of ethnic groups has scarcely changed. The ethno-linguistic map of the French administrator is also the most recent, since there have been none that were as detailed, but were only fragments inserted into a larger scale.[14] The topographic surveys systematically produced by the US Department of Defense in 1972, then those of the Vietnamese done in collaboration with the Russians, mention the names of villages but not their size or ethnic affiliation. For the current period, we have produced Maps No.3 and No.4, which schematize the spatial distribution of human density and the localization of socio-cultural groups. The tables in the appendix indicate ethnic distribution by commune. The numerical importance of groups is extremely variable, since some consist of only a handful (Lum, Phnom, Chinese), while others exceed 10,000 (Tampuan, Jorai, Kreung).

Several points merit comment. Geographic distribution by population density, illustrated by Map No.3, is quite uneven. The interfluvial zone and, more particularly, the plateau that fades away to the Vietnamese border, contain almost all the population. The area south of the Srae pok, which corresponds to what Henri Maitre called "the desert of open forests", is completely uninhabited, with the exception of a few Laotian villages along the river. North of the Sesan, where the elevation rises as it approaches Laos, human settlement is also insignificant. The mountainous region is difficult to penetrate once outside the riparian biotope, and almost nothing is known concerning the population of the dense forest zones. However, it is quite probable that the hyperendemicity of malaria in its most pernicious forms (*falciparum*) significantly reduces human presence there. It is not impossible, however, that there are (or were) some isolated hamlets located in the region. In the Kachac villages visited north of the Sesan, men evoke the existence of the mysterious Bailevin (Boloven?), a nomadic ethnic group renowned for their supernatural powers and who survive (or survived) exclusively by hunting, fishing and gathering. Moreover, American studies done in 1962 speak of the tribe of Halang (or Saleng)[15] located at the intersection of Vietnam (30,000 persons), Laos (10,000), and Cambodia (unspecified figure), notably in the "dragon's tail."[16] During the Indo-Chinese war, a large number infiltrated Cambodia before the Vietcong advance, but no additional indication would affirm their presence there today. The human massacre during this troubled period must be remembered, a veritable holocaust that reduced the chances of contemporary survival. The same applies to a small group of Biet specializing in the capture and domestication of elephants in the extreme southern part of the province, whose old villages have now disappeared. As for the Burmese community, which came to settle in the region of Bar Kaev during the period of the proliferation of zircon, ruby and sapphire mines, it totally disappeared after the decline in mining activities.

If one leaves aside these four cultural groups, whose existence is either ancient or uncertain, a dozen different ethnic groups can presently be distinguished: eight are Proto-Indo-Chinese and four are of Khmer, Lao, Chinese and Vietnamese origin. Among the first, seven belong to the Mon-Khmer linguistic group (Tampuan, Kachac, Brao, Kreung, Lum, Phnom, and Kraveth), and one to the Malayo-Polynesian or Austronesian group (Jorai). Only the Brao, and this is a matter of one village with 76 inhabitants, have been the subject of a study, in 1967.[17]

The Kraveth, Brao, and Kreung can understand each other without too much difficulty. Their dialects are enriched by Lao vocabulary and exhibit undeniable similarities. Culturally, socially and physically, however, they are different. This entire linguistic subgroup, to which the Lum, migrants coming from Stung Treng can be added, live scattered in various villages near the border and are linked with a West Bahnaric group in the American classification. The Kraveth are the only ones to occupy forests located

on the right bank of the Sesan, without however bordering the river itself. The government envisions bringing together the riparian groups at the end of 1995, but they themselves show no predilection to do so. The establishment of Brao on the riparian biotope of the upper Sesan is already old, but again corresponds to a government decision. In fact, while Brao and Kreung villages are actually on the banks, the clearings where the families live three quarters of the year are several kilometers into the forest. The Brao are also found in small groups in Strung Treng Province, as well as in southern Laos, whence they originated. Certain inhabitants of Boloven in the region of Attopeu would be near cousins, whose solidarity as regards filiation the Brao tested when, made refugees from the territory during the Khmer Rouge regime, they requested their assistance. The Kreung live primarily on the western edges of the plateau, as well as between Ban Lung and Veun Sai. In a number of villages in the district of Lumpath (communes of Labang Muov and Labang Pir), the Kreung and Brao entered an alliance and affirm through intermarriage, favored under Pol Pot, that they henceforth constitute a single group.

The Tampuan form a well-defined linguistic and cultural group. They constitute the numerically dominant and oldest group on the central plateau. According to Bernard Bourotte, they would have crossed the southern part of the Sesan River in the nineteenth century.[18] At the end of the last century, their territory extended to the Vietnamese border, but they were pushed back by Jorai coming from Pleiku province in Vietnam. Some of their villages are also found in the provinces of Mondolkiri and Stung Treng. Those in Ratanakiri distinguish themselves as "high Tampuan" (those living around the Sesan) and "low Tampuan" (occupying the southern part of the plateau). They constitute two endogamous groups, each having more contact with neighboring groups than with one another. The Kachac, whose original name is Lamam, are concentrated on the banks of the upper Sesan. Under the urging of the Khmer Rouge, they adopted irrigated rice cultivation and consequently occupied the narrow plains of the fluvial basin. The Jorai, about whose bellicose reputation and spirit of conquest much has been written, monopolized the eastern part of the province after pushing the Tampuan towards the center and west of the interfluvial plateau. Their villages are densely populated. They represent the second largest group in Ratanakiri, although the major portion of the ethnic group, studied in detail by J. Dournes, still lives in Vietnam.[19] Further, there are a few small hamlets of Phnong (Mnong), probably originally from southern Mondolkiri, located on the upper Srae pok. One of the original characteristics of village composition in Andoung Meas district is the very strong social and cultural co-existence among three ethnic groups, the "high" Tampuan, Jorai, and Kachac. It seems that spatial proximity has removed the linguistic and socio-cultural differences that initially separated them. It is common to find a large house where the women – residence is uxorilocal – have taken as spouses

a Jorai, Kachac and Tampuan. This "ethnolyzing" process would force us to relativize the rigid classifications of our investigations, were these alliance relationships not circumscribed within a restricted zone including scarcely more than ten villages.[20]

The settling of Laotians, first in Stung Treng and then in Ratanakiri, goes back more than 300 years. They came less as conquerors or invaders than as colonists settling in successive waves along the Mekong and its tributary, the Sekong, to finally arrive in Ratanakiri on the banks of the Sesan and the Srae pok. If the first migrants were probably adventurers-cum-businessmen trading in slaves and other commodities (valuable timber, gold, ivory, etc.), it is no less true that their successors were, above all, peasants and fishermen seeking new arable lands and rivers stocked with fish.

The Laotians promoted the development of irrigated rice cultivation, until then unknown in the province. In the course of the next centuries, they founded their own villages or assimilated those of the local tribal populations of the fluvial basins.[21] A mild intermingling without religious proselytizing appeared, and many single men – coming to work in the mines – married, started a family, began to consider their kinsmen as Laotians and founded their own settlement, for example Phum Talao on the right bank of the upper Sesan. In certain regards, this assimilation was reciprocal, since a number of them learned the vernacular language (Brao, Tampuan and Jorai) and adopted new ways of living: participation in ritual ceremonies, apprenticeship in methods of acquiring forest resources, etc.

Except for the early arrival of various businessmen, Chinese settlement is more recent and less scattered. The first wave of immigrants left China at the beginning of the Cultural Revolution, and founded a small community named Phum Thmei Chen immediately west of Veun Sai. They controlled most business with the surrounding villages (Kraveth, Brao, Kreung and Kachac). A second wave, which continuously increases, settled in the provincial capital, drawn by the opening of the region and the possibilities of starting a prosperous business and land speculation. The Vietnamese are the newcomers, either from southern Cambodia or directly from Vietnam. They live for the most part in Ban Lung. They remain in a relatively closed community, living mainly from trades (masons, goldsmiths) or as salaried workers on the hevea plantation (tappers, workers in the processing factory).

While the relationship of Khmers with the province is, as we have seen, quite old, their permanent settlement is, nevertheless, very recent. Rare indeed are those who, like the Lao, have succeeded in adapting to the difficult living conditions or shown any intention of integrating themselves into the local populations. During the creation of a state plantation in the 1960s, some poor families from the provinces of Takeo, Svay Rieng and Phnom Penh agreed without great enthusiasm to migrate, with the encouragement of the government. The latter heavily relied on them to Khmerize the inhabitants. This attempt came to grief because of the lack of interest and perpetual fear of Cambodians

"from the lowlands" of living in the midst of a forest dominated by spirits and "primitives". In the end, only the western plain was colonized by Khmers when, leaving the plantation at the end of the 1960s with the intention of returning to their places of origin, they discovered the vast agricultural potential of the wide pediplains they crossed. The district of Koun Mom has been since then primarily a Khmer district with a few Laotian enclaves. The process of migration has been pronounced for some years, however, throughout the province: whether this be for government employment, trade/trafficking with Vietnam, or agriculture. Age-old mistrust thus tends to lessen as a result of access to facilities (boat, road and airplane), the establishment of a well-stocked hospital and the relative security that prevails in the region.

This brief panorama of spatial occupation in Ratanakiri shows the heterogeneous character of human settlement in a territory of highly varied relief. Now, the distribution of population density is a fundamental fact for understanding methods of managing the environment. In the course of the last three decades, a slight displacement of tribal populations is to be observed towards certain favored areas – the central plateau and riverbanks – to the detriment of locations formerly more dispersed, if one refers to old maps. This centripetal movement results in a quasi-sedentary life style that contrasts with the traditional forms of territorial occupation characterized by periodic displacement of settlement sites (every ten or twelve years on average). This change is in great part imposed by the authorities who hope to control and develop the resources of indigenous lands, in which rare and precious hardwoods are plenteous and where there is an abundance of rich and varied forest products.

The embryonic development policy has entailed the grouping of villages located on the axes of communication, but has also given rise to a few separations, as Jacqueline Matras suggests for the village she studied, which was divided into several hamlets following the appropriation of territory by the plantation. Similarly, during the nineteenth century, several villages, although remaining independent, were assembled into one large village that was fortified for defensive reasons. When the situation improved and the skirmishes with slave traders had subsided, some again separated, while in a few places others remained together (south of Bar Kaev, in Ou Chum in particular).

While the settlement is theoretically grouped together, it must be realized that during the major part of the agrarian cycle, families are scattered in their respective clearings and live in the house/grain loft located in the middle of the field. The average size of a village is 274 inhabitants, with a slight surplus of women (139 to 135). It is however common to find villages of more than 450 inhabitants, with a maximum of 841 persons: an enormous figure for land-clearing populations.

Table 5: Size of villages in Ratanakiri (in number of inhabitants)

Less then 100	100 to 200	200 to 300	300 to 450	more then 450
28	84	70	34	29

Source: Personal surveys, 1994 (urban agglomerations are not considered, nor the four villages on the Labansiek plantation)

Moreover, the considerable disproportion of density rates for various dialect groups has direct implications for the use of the environment: individual family management on a collective parcel among the Kraveth and most of the Brao, whose villages do not exceed 200 persons; and family management or management in terms of lineal affiliation, on isolated parcels among the Jorai and Tampuan, whose settlement is often more condensed and to which we will return.

The overall density rate is deceptive since more than half the territory is uninhabited. This results in an occupational density of more than 11 inhabitants per square kilometer in a space encompassing the narrow riparian ecosystem and the central zone of low elevation. This rate must be considered in the light of local ecological characteristics, since tribal populations consider numerous portions of the land as inappropriate for settlement: zones of open forest and savannah, sacred places inhabited by forest spirits, sites of ancient cemeteries, etc.[22] In spite of significant local variations, the density rate of Ratanakiri is clearly higher than the demographic density of Amazonian forest horticulturalists, who range from 0.17 to 3 inhabitants per square kilometer. It is lower than that of the over-populated provinces of the high plateaus of central Vietnam and northern Thailand in the region of Chiang Mai, where the critical threshold, assumed by some authors to be of 50 inhabitants per square kilometer for land-clearing societies, is often exceeded. It more resembles the density of the population of the Boloven plateau in Laos, where the rich fersiallitic soils, like those of Ratanakiri, allow concentrations approaching 16 inhabitants per square kilometer (as compared with 10 on the other wooded plateaus of southern Laos).

The modification of the "round" or "square" configuration for villages that tend to be aligned along the sides of a road is a characteristic feature of villages near the provincial capital and of those that have been displaced to the riparian ecosystem. The new form of settlement based on the Khmer model is not without consequences, because it introduces both a completely sedentary life (although it has not totally succeeded in this respect) and a change in the conception of relations between the social and natural environments. In fact, the village in its traditional form is the reflection of the world order on the basis of which rests not only the socio-territorial organization of the houses, but also the distribution of cleared lands in the village territory. Claude Levi-Strauss has shown, moreover, how missionaries in Latin America intentionally provoked a change in village territorial structures in order to change the internal social structures and cosmological

representations of indigenous populations[23] so as to make them more amenable to evangelization and "modernization". It would seem that a similar strategy is being implemented in Ratanakiri, under the pretext of development and regionalization.

In short, the apparent equilibrium between tribal and non-tribal populations is precarious and is due more to their respective desires for settlement, some preferring the heart of the forest and others the zones in the plains and fluvial basins, rather than their propensity to live together. At the moment, the points of interpenetration are weak and are limited primarily to vehicular roads along which Khmers set up small businesses here and there.[24] A certain reciprocal mistrust, related to historical circumstances, essentially restricts relations to bartering. The autochthonous populations are presently perceived as decent people from whom one can purchase cheaply all that the land produces. Some, like the Kachac, have nevertheless established networks of organized commercialization and make clear their intention and capability to enter a market economy. This is done on their own initiative, and it is this that constitutes their strength and success.

The equilibrium between social and human ecosystems (of land clearers) is even more threatened. The government anticipates the settlement of 20,000 Khmer peasants in Ratanakiri in the decade to come. One has the right to wonder to what degree this alien pressure, added to the spontaneous flow of Chinese and Sino-Cambodian migrant investors, will give rise to territorial encroachment and introduce disturbances into the rational management of natural resources. Traditional management, dictated by an undeniable knowledge of local ecosystems, rests essentially on a careful dispersion of villages, each having suitable space throughout which the family clearings are scattered. In overturning this vernacular division of space, by reducing the areas of each village, the system of swidden agriculture could become unviable. The concentration of cultivated areas, implying a reduction in the period of forest re-growth, risks being the immediate consequence of the nucleation of settlement zones and their forced and definitive sedentary lifestyle.[25] Techniques for using nature are adapted to the particularities of a specific biotope and are in risk of disappearing when the conditions of population growth and the *possibilities* of periodic displacement change. As a sign of this underlying evolution, it is significant to observe the strategies of unscrupulous private investors who monopolize patches of forest traditionally used and maintained by autochthonous groups, not to mention the foreign Asian companies with an eye on the fertile basaltic lands.

The political choice as regards development will decide the fate of local populations, now paradoxically called "minorities," those who have always been the numerical majority in the Ratanakiri population.[26] Rather than indiscriminately forcing them to make a radical change in their living conditions, it would be good to associate them with projects that concern them. Without keeping them in utopian isolation, it would

be appropriate to be prudent in the changes being introduced. Before undermining the knowledge of the land clearers and the manner in which they domesticate and view nature, it becomes urgent to make an inventory of their knowledge and methods. An understanding of the socio-cultural logics underlying their territorial organization and their agricultural practices, which we will now consider, may also prove to be an original lesson in human ethno-ecology, the relevance of which is to be verified.

Modes of acquisition by inhabitants of the forest

A major part of local knowledge about the environment finds its application in forms of appropriation and management of cultivated space. The products of agroforestry activities have their origin in the specialized management of resources that the earth provides and in the clearing of forest parcels for fields. Sometimes people transform the countryside, sometimes they content themselves with drawing what they need from the surrounding biotope. While subsistence economy is the dominant type of economy, it remains no less the case that certain crops, wild plants, animals and minerals are the objects of commercial activity that is most often concretized in the form of barter, and this from a very early period, as is shown by relations maintained from the eighteenth century with the Laotians. The cultivation of irrigated rice is also appearing and is becoming the standard of exchange. While it is true that the village represents the socio-territorial unit of reference, it is no less true that it does not constitute an isolate. Inter-village and inter-ethnic relations have always existed and tend to expand with the arrival of Khmers and Sino-Cambodians. Certain villages located near the provincial capital and district administrative centers thus begin to orient themselves towards a market economy without, for all that, abandoning swidden agriculture, which is not only their preferred technique of acquisition but remains the symbol par excellence of the way of life of the Proto-Indo-Chinese.

Land clearing

Swidden cultivation constitutes the principal method of agriculture practiced in Ratanakiri. This extensive practice, often decried as being the major cause of the partial destruction of evergreen forests, is not always done uniformly, however, and obeys strict rules, the code of which varies not only from one socio-cultural group to another but also sometimes from one village to another. These variations depend on the characteristics of the geographic milieu, as well as on the structures of social organization reflected in the method of utilizing village territory.

In a general way, such a method of developing space demands a favorable milieu and social organization propitious to dispersion. Jean Boulbet notes that the basic bio-geographic milieu is furnished by the tropical dense forest with an evergreen tendency when it covers naturally drained soils of uneven chemical value, but sufficiently deep

and porous for vegetation to take root.[27] This type of forest indicates relatively abundant and well distributed precipitation, a condition *sine qua non* for the sufficient watering of dry crops. The human factor is just as crucial. A human concentration that is too great risks an intensification of cultivation and a break in the traditional management of space, in which considerations of time, place and stages of regeneration play a role when choosing the location of cleared fields.

A salient feature is the diversity of modalities involved in the practice of swidden agriculture. On geographically similar territories, populations have recourse to many strategies of agroforestry management. This is not an isolated observation and extends to regions of northern Thailand, Vietnam, and Laos studied by other researchers.[28] This means that the understanding of indigenous forms of occupying space cannot be explained only in terms of the adaptations forced by a difficult environment. The *milieu suggests but does not impose* and the different socio-territorial organizations linked to agricultural practices cannot be reduced to a simple explanatory schema based specifically on the action of ecologically limiting factors, as some authors have claimed.[29]

Land clearing is a long-term technique based on the knowledge of the stages of forest regeneration. It aims to domesticate nature without vanquishing or dominating it. Each operation in the agrarian cycle, which we will describe in more detail in the second part of this work, from land clearing, the burning of felled trees, sowing and weeding to harvesting, is accompanied by propitiatory ceremonies. The forest is the chosen domain of the spirits, and the insertion of ritual into techniques, agricultural practice and the organization of space is seen to be an integral part of the life of the land clearer. A soul is ascribed to rice, and the veneration given to the principal variety (*vang*), which the myths say was given to humans by the gods, largely contributes to the integration of humankind into their milieu and to the codification of a system that guarantees the continuation of swidden agriculture and, by extension, the preservation of the forest milieu.

In land-clearing communities, life is organized at the level of village, clan, lineage, and extended or nuclear family. These tendencies, which to a greater or lesser extent authorize individualism, are inscribed in space and have profound implications for the unfolding of agricultural techniques. Thus, family plots can be contiguous, forming a field (*miir*) shared by several related families among the Jorai, or a large village parcel in one block, as among the Kraveth, Phnom and Brao. Conversely, personal fields can be isolated from one another in the same village territory, like the Kachac and Tampuan sites. Among the latter, all the *miir* of the same residential lineages are close together, although separated by intact portions of the forest. Because a strictly family plot has moderate erosion compared with the erosion affecting the single field of a *phum*, where the runoff is greater, the length of time during which a cultivated plot is occupied, in addition to pedological conditions, will depend on the form of socio-spatial occupation:

on red laterite soils, individual fields are occupied between three and five years, with progressive abandonment of the old portions beginning in the second year. In contrast, individual fields grouped together on a collective clearing are never used for more than three years, or even less if they are located on a slope.

An important initial observation is that Ratanakiri land clearers are not nomads. Wandering bands clearing forest parcels in the course of their random movements are never seen. The use of the term shifting cultivation to characterize their agricultural activity is thus misleading because, while the cleared lands are indeed temporary, they are confined within clearly defined bounds. After having been cultivated for a few years, they are abandoned, and then reused – not necessarily by the same family – following an empirically observable rhythm.

While the months of the dry season correspond to a period of reduced agricultural work and an intensification of intra-village social relations, a dispersion of social groups is observed beginning in April. Except under particular circumstances (death, disability, etc.), the organization of work rests on the constitution of small economic units, of which the nuclear family is the dominant model. Each social production unit leaves the village and settles with increasing diligence in the house built in the center of the cleared field, where the rice harvest is stored throughout the year. Following this move, people return only occasionally to the family house. Certain Kraveth, Kreung and Brao villages are seen to be completely deserted for more that half the year. This biannual variation in settlement is found in the relation the people maintain with their environment. While they remain in the village during the months of feasting and festivals (when marriages, second funerals and collective and familial ceremonies occur), the prohibitions are removed and it is permissible to go to the forest in order to obtain what one needs. When the work in the fields resumes, the activities of hunting and fishing are explicitly more codified and numerous taboos appear, with variations according to social categories: clan, position among kinsmen, etc. This is the time when men, women and children must concentrate their attention on the cultivated fields.

Notwithstanding the apparent commonplaceness and uniformity of the miir, different methods of agricultural management are also to be seen. Among the Brao, studied by Jacqueline Matras,[30] village parcels are cut up in long, narrow, regular bands that follow the slope of the land. In order that the units belonging to each family are equivalent in quality, bands that stretch across the entire clearing are allocated to each production unit, rather than a broad section to a single tenant. This method of division means that all the contiguous stripes cross the same differing soils, thus precluding that households co-existing on the same field are disadvantaged compared with the others. This is different among the Tampuan, where the choice of location of the fields involves a single family. This choice is dictated by the location of the house in the village, in such a way that the spatial distribution of fields is a projection of the socio-spatial organization of the grouped settlement. The reproduction of the structure of the village contributes to the perpetuation of an "organized" dispersion of the families in the forest milieu. Relatives through marriage belonging to a lineage whose houses are located in the north-east will have their fields clustered together, although clearly separated, in the north-east part of the village territory, and so on. The spatial proximity of agnates is also seen in a system of mutual aid (exchange of labor time, compensation in kind or cash) within the extended matrilineal family, lineage and - although less often - clan. Territorial division is clearly seen in hamlets, arranged traditionally either in a square or oval form, where a clan's (omay phong) appropriation of a cardinal direction is the model for the layout of the fields. That is, each group that constitutes a familial, social, ritual and economic unit is also a territorial group with management of a forest space that includes not only the field but its surroundings, within implicitly recognized limits. The Kraveth, among whom each village has a common field located preferably at the bottom of a thalweg crossed by a stream, use, on the contrary, the layout of individual family parcels of the field as a means of projection in the surrounding forest space. A rotation system of families on the parcel for each new clearing allows every household to maintain in turn the outer boundaries of one part of the miir (protective fences and traps for small mammals), and to invoke the local spirits identified in the section of the adjacent forest in order to preserve all the fields under cultivation.

From these few comparisons, which would call for many others, it becomes clear that the search for economic efficiency in a given set of environmental circumstances does not imply only one form of social practice and relations. The human social systems present in Ratanakiri include natural ecosystems, not the reverse. In other words, even in conditions of total dependency on nature, nature is re-ordered according to the socio-cultural specificities of the groups which live there.

This primacy of social structure, and not of the ecological milieu, appears in an obvious manner in the course of observable processes of change among certain populations. At Phum Koh Pieh, on the banks of the Sesan in the district of Veun Sai, the Kachac have developed one of the most beautiful groups of rice fields to be found in the province. What is remarkable is to hear them speak of their "Khmerization", not only because of their adoption of irrigated rice cultivation but, above all, because of changes in their social organization. While traditionally having a kinship system of the harmonic type (matrilineal, matrilocal, name and goods transferred through the mother) in which the younger brother of the mother – the maternal uncle – represents the key figure in the kinship unit, that is, the exceptional and dynamic element of the system, one notes among certain families a shift towards a system of the patrilineal type. This implies, among other things,[31] that children bear the name of the father but, more than that and what concerns us directly, village and family socio-territorial organization are changed. Indeed, in an uxorilocal system, the man goes to live in his wife's home.

Among the Kachac, this is traditionally a longhouse with interior partitions constituting several households where the mother and father, their married daughters and their children live separately. Now, the atomization of the settlement composed of nuclear families is increasingly observed: as a result of the spread of rice growing, cultivated and irrigated land becomes private property, in contrast to cleared fields, the ownership of which is reduced to a simple temporary right of use. It follows that men retain the right of ownership to rice fields and take charge of marketing of the surplus. In this way they try to claim greater independence and be "masters in their own homes", and transfer their prerogatives to their sons. But to do that, they must distance themselves from the men of their wives' families, who until now had control of all material goods through matrimonial alliances. Everything takes place as if, in the Kachac context, the gradual passage from a matrilineal to a patrilineal organization was combined with (but without conditioning) the shift from a mode of semi-shifting agriculture, without consideration of ownership, to another mode that is apparently more stable in time and space and that necessitates more permanent and solid social relations between men of different generations.

The existence of a coherent system of relations in which the rules of kinship extend to various functions (economic, social, ritual, and land use) is nothing exceptional, inasmuch as this has been demonstrated by a multitude of ethnographic examples throughout the world. As Marshall Sahlins has remarked in this regard, it is "neither extraordinary, nor the product of a speculative interest; it is a real condition of social life".[32] If environmental differences are connected to differences in political status, it is because the relations that regulate production also regulate socio-political organization. The case of the Kachac is a typical example showing a close association between social structures and modes of managing space during a process of change. New modes of production expressed by a change in agricultural practices imply not only a transformation in relations to the environment but also a change in the organization of kinship. However, one should not see in this traces of an adaptive determinism tending to demonstrate that the forms of agricultural activities constitute the infrastructure to which must correspond an ideological superstructure that is only a pale reflection of material constraints on the society and its mode of production. It is rather a condition of its functioning and sustainability, without which the new system of production would contradict the old type of social organization, which is more propitious to the distribution by matrilineal kinship groups in familial land clearings. But the converse can prove to be true: the evolution of ways of managing nature can contribute to a similar structural evolution in village social structures, independently of ecological constraints. One finds this tendency in the Cambodian governement policy, which, by favoring new forms of agriculture, tacitly hopes to make the villages sedentary, change their socio-spatial configuration - and better assimilate them.

Land clearing is not the only technique for the agricultural utilization of space practiced by the Proto-Indo-Chinese in Ratanakiri. Irrigated rice cultivation appears gradually here and there in the zones of plains and flat valleys that can be covered with water during the growth of paddy. Some villagers are permanently employed (a few Kreung, Brao and Tampuan) or temporarily employed in hevea plantations in Labansiek, others (more rarely) are agricultural workers, clearers for private companies or simply for recently settled Khmers. Still others are miners in the zircon deposits towards the region of Bar Kaev, or occasional gold washers during the dry season on the banks of the Sesan or in the gold mines in the district of Ou Ya Dav.

The introduction of irrigated rice cultivation

Different agricultural techniques, co-existing or separate, can also correspond to edaphic conditions. Certainly, the greater part of the central plateau with its rounded forms is not suited to irrigated rice cultivation, but there are on all sides numerous natural small plains that are somewhat enclosed and without shrub vegetation, which are extremely favorable for the development of rice cultivation of the plain. These vacant spaces have various dimensions and are found primarily in the east and west of the province, as well as on river banks.

Moreover, the forest reserves in the east of the province, which are largely exhausted not because of intensive occupation or intrinsically bad geo-ecological conditions but for historical reasons (bombing with napalm and defoliants in the early 1970s), have given rise to new development practices. The clearing of these lands - dominated in places by grasses used for building straw huts (*Imperata)*, which are difficult to clear once they have taken root, and in other places by savannah with numerous thickets - becomes a practice of substitution. This involves a choice forced by the degradation of the vegetal cover, a process that has been going on for several years on Jorai territory near the border with Vietnam. We note that Jean Boulbet, in the 1960s, mentioned this same process used on the plateaus around Pleiku, the province in south Vietnam adjoining Ratanakiri. Land clearers in Ou Ya Dav district clear certain brush savannah, which is practically the only vegetation remaining on the red soils on the right bank of the Sesan. Similarly, the lowlands are transformed into irrigated rice fields. This phenomenon has increased in the last decade and it is rare to see a village in the eastern zone living exclusively on dry crops.

Rice cultivation has, however, been introduced only recently. Except for a few parcels worked by the Jorai before the 1960s and with an encouragement that had few results in developing the plains during the Sihanouk period, it was primarily during the Khmer Rouge regime that irrigation developed in Koun Mom district, and more sporadically in Ou Ya Dav, south of Veun Sai, at Lumpath, and in a general way along the two rivers. While the construction of wide, high dams, the arrangement of large parcels

and the system of irrigation and drainage proved to be inadequate and quickly fell into disuse, it remains no less the case that some populations, notably the Kachac,[33] whose original villages were located near the convertible plains, knew how to take advantage of this knowledge and voluntarily adopted rice cultivation once the Pol Pot regime was overturned. The Vietnamese, then the new Cambodian government in place since 1993, continued this policy of encouraging the abandonment of swidden cultivation by supplying certain villages (among the Brao and Kreung of Ta Veng and Veun Sai, and the Tampuan of Lumpath, in particular) with the necessary innovations, such as the plow, swing-plow, and a pair of buffaloes for plowing. Except for cattle, which are favored by Proto-Indo-Chinese not for the advocated use but for being butchered on the occasion of sacrifices, which are followed by joyous feasts during ritual ceremonies, one must recognize that these attempts have met with only moderate success down to the present. This is not only for cultural reasons (way of life and social structure linked to land clearing) and techniques (lack of access to appropriate material), but also because of the risk of deterioration of fields under cultivation, risks that, according to the Proto-Indo-Chinese, are greater in the rice fields, mainly because of domestic livestock causing considerable damage after the bedding out period. The association of animal husbandry and irrigated cultivation apparently poses problems for villagers, who are not accustomed to building enclosures for cattle, penning them up and watching over them, and efficiently protecting the irrigated fields from the intrusion of wandering animals·

What is more, those who devote themselves to rice cultivation do not automatically abandon land clearing. Rice cultivation in the plains supplies only rice (heavy, light, and average), while cleared fields provide, as we will see, in addition to a great variety of dry rice, numerous vegetables, cultivated plants and fruit trees. This diversification, which constitutes the basis of the daily food supply, is difficult to replace insofar as the polyculture on the banks (*chamcar)*, characteristic of the agricultural space of Lao and Cambodians, does not exist among Proto-Indo-Chinese, in spite of attempts to introduce it in the 1960s. Thus, among the Kachac, 90% of the cultivators preserve one or several small gardens on land clearings alongside their rice field or on the lower foothills, while 10% devote themselves exclusively to irrigated cultivation. The combination of these two types of agricultural practice requires a rigorous time scheduling: in May-June, dry rice is sown and cultivated, at the same time as certain vegetables and tubers are planted. Then in July, the peasant turns to his rice field. The bedding out of rice is done in August, just before the weeding of the cleared field, which takes around 15 days. In September, the peasant returns to the rice field to lay out small embankments, repair and maintain the parcels and, at the end of the month or the beginning of October, the rice (light varieties) is harvested. Immediately after this, the first harvest begins in the rice field. This alternation between dry and irrigated crops continues until the end of December/beginning of January, and five or six harvests follow for four

months: three for the rice field (in order of succession: one for light rice, one for semi-light or glutinous rice, one for heavy rice), and at least two for the early and late varieties of dry rice. It is interesting to note that cleared fields are changed by the Kachac into "security" fields, which supply most of the food consumed. Although their utilization is directed towards subsistence economy, the rice field in the plains is associated with an essentially commercial crop, although part is preserved until the end of the period of scarcity in the case of a late harvest or subsequent low production. The few families who abandon the cultivation of cleared fields in the forest nonetheless keep a small area, which can reach half a hectare in size, next to the rice field where they grow varieties of field rice supposedly more resistant than varieties of the paddy field. The laying out of a plot referred to as a "security" plot, based on a more familiar method of cultivation, is found not only among the Kachac but also among the Brao in Ta Veng and the Jorai in the low plains of Ou Ya Dav.

The passage from one method of cultivation to another does not occur without changing the ritual relations to the natural milieu. The Kachac in Phum Karat (Andoung Meas) say that rice growers, who accord an importance to the influence of the moon on the growth of paddy, have undergone Khmer influence because sacrifices were traditionally made instead to the spirits of the forest in order to obtain a good harvest. This notion of sacrifice remains fundamental, inasmuch as it also constitutes the culminating point of religious life as a sacred act that unites people to their surrounding milieu. As the spirits do not remain in the plains but prefer to live in the hills (*phnom)* and in large trees of the dense forest, sacrifices are not made for the rice in the paddy fields but only for the rice in the cleared fields, which is thus important to preserve in one place. To abandon the cultivation of the latter is no longer to give allegiance to the divinities of the forest and to cause a rupture, the consequences of which can have dramatic effects on human society.[35] The ritual relation is also a relation of belonging, because the land becomes an asset that is transferred from generation to generation, whereas formerly it was the property of the forest spirits that men could cultivate only for a limited time.

Fishing, hunting, gathering and mineral extraction

For the people of the rice field - the Khmer and Laotian "*neak srae"* - and to a lesser extent for tribal populations who practice rice cultivation on the plains along the Sesan (Kachac, some Brao and Jorai), the principal source of protein is fish. An astonishing fact: on the arrival of the rainy season, the aquatic life that had led a slowed life in the dry, cracked clay lands, again appears and re-populates the rice fields, ponds, and adjacent waterways. The peasants then put hoop nets between the dikes and trap in particular the well-known black fish, which are able to breathe atmospheric air, either through systems of peculiar gills or through pockets of water located in the skull, and are able to live with a slowed metabolism and to move in the open air.

Several techniques of fishing are practiced in Ratanakiri, a function of the location, season, dimension of the body of water and certain socio-cultural particularities of the ethnic groups: net, line, casting net, hoop net, square net, trou (a type of long oval net), asphyxiation, poisoning or even using explosives in deep places.

Of the two rivers that cross the province from east to west before flowing into the Mekong, the Srae pok to the south has the most fish, with more than a hundred different species divided according to a vernacular classification that defines fish with scales (*trey sraka)* and fish with smooth skin (*trey mael)*. The most beautiful specimens, without scales and among the largest fresh water fish in the world, along with those found in the region of the great lakes, can reach 30 to 50 kilograms and are called *trey kya* (*Catlocarpio siamensis, Pangasius* or cat fish). Farther north, the Sesan is also rich, although the fishing cornucopia is not as diversified. During the period of high waters, the fish go upstream and infiltrate the many small tributaries; then, when the waters sink, the fish leave the waterways. These are the most propitious times for fishing, in particular the month of October, when people construct embankments that catch the fish attempting to the rejoin the rivers.

Lao and Khmer villages adjacent to the banks are populations of fishermen, although this activity is not their only occupation. Part of the catch is meant for sale: Khmer and Vietnamese vendors come to buy fish in the morning in order to sell them at the Ban Lung market. The rest, not saleable, are for family consumption during the coming months, thanks to multiple methods of preservation: smoking (above all among the poorest families); drying (a more and more persistent odor); salting in a jar for three to four months; and finally, in the form of *prahoc* paste in the case of small fish.

For other ethnic groups, fishing remains a supplementary activity, including for some, like the Brao and Kachac, who live along the river. It is nevertheless important because it is practiced in numerous waterways and streams that drain the area and thus contributes a significant nutritional food supply during the period of scarcity and in the dry season when, due to the absence of current, low water levels and partial drying of certain waterways, the capture of small young fish is easy. The principal method consists of erecting a sufficiently strong embankment in a place where the land is already slightly uneven. A first embankment is built four or five meters upstream using round wooden logs secured on the bank so that leaves and branches do not obstruct the trap. Downstream, at a place with a slight declivity, a woven basket reinforced by bamboo strips is placed across the breadth of the stream. At the center of the stream, a large rectangular net more than three meters long and one metre in height, ending in a movable trap, is placed horizontally. Overhanging the river in this way, it forces the turbulent water through so the fish remain trapped inside. In smaller streams, these large and magnificent installations are replaced by small barrel-shaped hoop nets, the breadth of which does not exceed one meter. They are usually made from bamboo, the end of

which is spilt into several lengths and perfunctorily woven together. These constructions are private and the catches go only to the family involved. Generally, these hoop nets are placed when possible near land clearings or by the road leading to the village. Signs (pointed bamboo, crossed wood) indicate ownership and forbid its use to any stranger.

Some collective fishing of a ritual nature is done at the watering place of a small river when sowing occurs, most often using ichthyotoxic substances. Thus, for example, several vegetal products known to the Tampuan – pounded bark (*Disspyros hermaphroditica, Barringtonia acutangula* Gaernt.), roots (*zyzygium sp., Milletia, Papillonacees*), latania fruit (*Corypha lecomtei* Becc.) and other pounded and crushed leaves - are used. Fishing expeditions that can extend for more than a week and necessitating displacements of more than 30 kilometers have been mentioned.[36] They are, however, not undertaken by all the villages of the plateau.

Hunting constitutes an important activity that is exclusively masculine and most often individual. Jacqueline Matras states that among the Brao, hunting activities do not come close to holding a place comparable to fishing.[37] This claim is, however, far from being verified among all the populations in Ratanakiri. Among the Tampuan, for example, hunting is an integral part of everyday activities. Young people learn to make use of the slingshot and, above all, the crossbow (*chieur ha*) – the principal weapon used by all the ethnic groups – as soon as they can walk, so to speak, by using smaller models made by the adults. On reaching adolescence, they receive a larger crossbow, which they subsequently always keep with them. Learning about the seasonal behavior of animals and their habitat, as well as being taught to imitate their resonant sounds, forms an integral part of the traditional education a father transmits to his son. On each trip to the forest, and if only to go from the village to the field, the young men regularly carry their crossbows in case they encounter game on the way. In the course of the work season in the clearings, it is not rare to see men taking advantage of a rest period during the day to lie in wait at the edge of the forest or of a pond where game come to water. In certain Kreung and Brao villages, hunters use spherical mobile shelters made of bamboo and rice straw and move concealed in this way in the forest. During the humid season, the Kachac and Brao, who devote themselves to irrigated agriculture, leave at nightfall to hunt small faunae (snakes, birds, frogs, rats) in the rice fields. They are equipped with a torchlight tied to the head and are accompanied by a horde of children gesturing and howling, supposedly to incite the game to leave their hiding places. Others, finally, use firearms[38] (shooting small mammals, birds) in a way certainly more efficient but also more questionable in regard to the environmental balance. In the dry season, another technique consists of smearing glue (with a base of several oleoresins) on small tree branches in order to capture birds. The preparation of traps is also very widespread. They are used not only to procure animals for food but to protect crops

from potential predators. The main types of traps are the fall-trap for catching small gnawing mammals, the pitfall trap, and the trigger trap reserved for larger game (pangolins, monkeys, deer, etc.). For animals of average size, such as wild boar and carnivorous mammals, Proto-Indo-Chinese put deadly substances – poisons made from various plants – on their sharp bamboo arrows. In addition to the daily hunting mentioned above, there are times and periods of the year that are more or less propitious for catching animals: namely, nights of new moons during the dry season, and evenings during the rainy season. Kachac and Jorai men leave in small groups for several days, going in the direction of the vast uninhabited territories, and cover more than a hundred kilometers in expeditions, particularly in search of large game.

Nevertheless, it must be recognized that terrestrial faunae represent only a small part of the meat diet, which is supplied more by domestic animals (buffaloes, pigs and fowl). Although these are consumed only on the occasion of religious ceremonies, wild animals allow a diversification of the daily diet. Most of the villagers agree in saying that the faunae of the forest are both less diversified (except perhaps bird faunae) and less abundant than formerly. Large game is rare on the low plateau, and it is becoming rare to trap an adult deer or a wild buffalo, even more so a carnivorous animal (tiger, leopard). In the 1960s, bovine (*kouprey,* gaur, *banteng*) and cervid herds were seriously decimated by soldiers and other officials sent to "develop" the region, not to speak of the dramatic effects of bombing in the eastern part of the province. Wild elephants - the capture of which for domestication entailed large collective expeditions - and tigers, which were formerly abundant, are now found almost only in remote places (the hills and mountains north of the Sesan, and the forests south of the Srae pok towards Mondolkiri). The war between the Vietcong and Americans, then the Khmer Rouge period, accentuated the disappearance of certain species, notably monkeys and crocodiles systematically hunted with rifles by *Angkar* soldiers,[39] and part of the population had no choice but to find something to eat during periods of food shortage. Today, another form of hunting is fostered by the increased commercialization of certain species, like the lemur – much sought after for its reputed therapeutic and prophylactic virtues by the Khmers and Chinese in the cities – but also the pangolin, the scales of which are reputedly in a Chinese pharmacopoeia – and the different varieties of tortoises that are the object of an international agreement between China, through Vietnam. This foreign demand tends to increase with the improvement of provincial communication routes with the rest of the country, as well as due to the fascination that certain parts of wild animals exert on urban populations: wild boar's teeth – in lieu of tiger's teeth – serving as amulets, wild buffalo horns for their aphrodisiac qualities, stomachs of mammals sought to augment vitality and strength, etc.

Indigenous knowledge of the habits and morphology of animals is indeed an indispensable requisite for an efficient practice of hunting and fishing. However, the knowledge

of the behavior of aquatic, terrestrial, and aerial faunae is not limited to hunted species. It also concerns species having no apparent practical use other than for hunting or for protection against dangerous animals. We have not been able to make an inventory of the many generic categories or seriously look at the logic of classification, but it goes without saying that the taxonomic order is independent of the potentialities of uses attributed to different animal species. Vernacular knowledge integrates numerous non-edible species (or that seem to be such) and a plethora of insects, butterflies and birds; it constitutes as such an instrument of pure knowledge that allows one to comprehend the world, as well as being a practical tool intended to deal efficiently with it. Once again, it can be said that the classification is not exclusively ruled by utilitarian reason or even by the necessity of adapting to a restricting milieu, disregarding all other intellectual considerations.

While hunting and, to a lesser degree, fishing are activities essentially controlled by men, this is not the case for the collection of wild plants and various products the forest offers, the gathering of which is done primarily by women. It seems, however, that the search, selection, gathering and transport of numerous varieties of bamboo constitute a notable exception to this rule. The knowledge that ethnic groups have of the plant realm existing on their land and of the way these plants can be used are numerous and varied. Anyone who goes to the forest accompanied by a Tampuan, Jorai, Kachac or Kraveth easily understands the extraordinary ability of indigenous persons to name, describe and comment on the stages of maturity of trees and ligneous and non-ligneous species encountered along the way. Without going into details, we will note, on one hand, the extreme diversity of plants gathered for food, health, crafts (plants for dyeing, vegetation for house construction), rituals and other symbolic uses. Some plants, in particular bamboo (examples of the multiple uses of which are mentioned in this chapter's Appendix), are used in such a multiplicity of ways that it is possible to speak of a "plant civilization," using the expression of the geographer Pierre Gourou. The grouped settlement of houses on stilts built entirely of plant materials (bamboo, timber, rattan, straw, woven leaves, etc.), like the elegant houses built on the clearings, attest to perfect mastery in the domestic use of forest products for construction. In view of the land-clearing practices that have been applied for hundreds of years in the region and the mobility of settlement zones, which are sometimes discernable due to former plantings made in places where the vegetation has regained the upper hand, numerous useful species found in nature are in fact remnants of cultivated plants. This is the case with certain kinds of banana and fruit trees and food plants found at the same time in clearings, village gardens and secondary forests. In this sense, the indigenous populations participate in the augmentation of the biological diversity of the forest ecosystem more than they contribute to its diminution, as certain poorly informed people responsible for rural development would give one to believe.

What has been said for modes of indigenous animal classification is also valid for plant taxonomy. The interest shown in vegetal landscapes and in different plants cannot be imagined within the narrow limits of purely pragmatic interest, inasmuch as plants, roots and fruits that are not used are nevertheless known, named and identified in great number. We note, however, that knowledge of plants is not systematically adopted by everyone in a particular ethnic group. In this sense, the extent of knowledge concerning vegetal nature varies from one village to another, from one person to the next. Thus, the vernacular names can designate, depending on the people questioned, either a single plant or a group of plants quite similar in their botanical characteristics. Conversely, certain plant species are given two or more names according to the use for which they are meant (edible, non-edible), or according to the part that is used (root, bark, pod, trunk, stem, fruit, leaf). Whatever the case, the richness of vocabulary that we have witnessed among the Tampuan regarding the natural milieu, which could certainly also be found among the neighboring ethnic groups, shows the desire of these populations to understand, order and construct the world, not according to a pre-logical mentality as Levi Bruhl thought, but according to a logic in a "savage state" that demonstrates, to use the expression of Claude Levi-Strauss, the mental ability to construct and elaborate structured ensembles based on events that are not necessarily structured among themselves, but rather that are drawn from the experience of daily life.[40]

A final non-agricultural activity that should be mentioned is the extraction of minerals in the east of Ratanakiri. The artisanal exploitation of zircon and other corundum in low quantity (sapphires, rubies) probably dates back more than sixty years, during the time when the Laotians began to excavate pits in the region of Bar Kaev and later in Boloi. Currently, it is principally the Tampuan of the low central plateau, and perhaps the Jorai east of Bar Kaev and west of Ou Ya Dav, who continue this activity, which, given the relatively precarious conditions of exploitation and the average quality of the stones, proves to be of low economic profit. It is, for most Proto-Indo-Chinese, a supplementary activity, outside of the most important deposits located near the capital of Bar Kaev district, which are exploited almost all year (with a slowdown in the rainy season) by Tampuan families. In the villages of the central plateau, a few scattered pits are always to be found that are excavated during the dry season – when agricultural work slackens –, but rarely deeper than six or seven meters. However, it is interesting to find among certain social groups the idea that the ground cannot be "killed" (excavated, drilled) with impunity. A prohibition is imposed in certain places against digging in the ground or even scratching on the surface, such as a hill in the district of Ta Veng that is scrupulously guarded by Brao villagers, notwithstanding the known presence of semi-precious stones in deeper layers of the subsoil.

Apart from zircon, the Jorai exploit – or rather exploited before the Khmers and Sino-Cambodians, using underpaid Vietnamese labor, cornered the land and the market –

open gold mines in Ou Ya Dav District. Here again, the output is low and the working conditions are extremely dangerous because of landslides (digging of transversal tunnels without effective protection, sometimes without any protection at all). Also found here are silver and other mineral traces (bauxite, manganese, etc.), which are most often abandoned because of the minute quantities detected. Gold is also traditionally sought on the banks of the Sesan River and in some of its tributaries, particularly during the dry season. The presence of this mineral has caused much ink to flow and nourishes many speculations about Ratanakiri, considered wrongly by some Khmers and westerners as an El Dorado that is still relatively untouched and where it is possible to come and try one's luck.

An allegedly enclosed region that proves in fact to be a long-standing region of passage and exchange, a region where biological and cultural diversity is unique in Cambodia, Ratanakiri is experiencing a critical moment in its history. The changes, if not to say the socio-economic mutations to come, are unavoidably overturning current agricultural practices. By modifying these practices, it is not only a part of the technical knowledge that is jeopardized, but also conceptions pertaining to the mode of relations that individuals in society maintain with their environment. In the section that follows, we will focus on the techniques and modes of knowledge related to agricultural practices of one of the groups that seems to us the most threatened, inasmuch as it lives in the center of the basaltic plateau on the most fertile soils of the region, and is therefore subject to speculation on the part of the state and private investors, as well as by foreign companies.

A case study: Society and land clearing among the Tampuan of the central plateau

"What is more, and this is of considerable importance for the producers-consumers, most of the products of a given field obtain from the humus mixed with ashes a particular fragrance that none of the agricultural modes on the soil of old exploitations can claim to provide (…). This unique fragrance, increased by that of the recent fires, lends the products of forest cultivation the odor and taste of a powerful vegetal life, spontaneous and caught in full force, stemming from myriad decomposition. It is not a fortuitous aroma redolent of the soil, but of primordial savors that, having once been experienced, can only be yearned for and the conscious privation of which awakens a real loss. (…) The peasants dwelling in the forest, using only salt, cook very simply, in boiling water or on embers, dishes that draw an irreplaceable bouquet of sudden and fleeting rejuvenation from the soils enriched with patient humus-bearing accumulations."(Jean Boulbet, Paysans de la forêt, 1975, p.6)

The description of agricultural techniques and the essential rituals associated with them will shed light on the meaning and logic of an agricultural system practiced among the Tampuan of the low plateau.

Certain representations that formerly circulated on the subject of land-clearing populations should be clarified. A first point concerns the way of life of the Proto-Indo-Chinese: what forms of social organization govern their agricultural practices? Is land clearing associated with an itinerant way of life, and in the case of the Tampuan, does this mean a non-sedentary way of life? A second point involves a vast set of ideas regarding the environment, generally accepted but without scientific foundation, and upon which debates concerning the acts and thoughts of the ethnic groups of Ratanakiri repose. It is thus necessary to resolve the ideological aspect of the discourse pertaining to the relations between societies of land clearers and their ecological milieu, and to replace it with concrete facts resulting from prolonged observation in the field.

We will concentrate mainly on the study conducted in the Tampuan village of Phum Chon – 450 inhabitants – located some ten kilometers east of the provincial capital. This village is in the khum of Aekakpheap, in south-eastern Ou Chum district. The khum includes three other Tampuan villages of smaller size: Phum Krouch, Phum Lom, and Phum Pqua.

Nomads, semi- nomads, or sedentary people?

The Tampuan constitute the numerically largest ethnic group in Ratanakiri, with more than 16,000 persons. They also represent one of three principal groups – along with the Kui of Stung Treng and Preah Vihear, and the Phnong of Kratie and Mondolkiri. All stemming from the Proto-Indo-Chinese populations living in Cambodian territory.

This having been said, we note here that membership in an ethnic group does not constitute an exclusive framework of reference because often the proximity or the geographic co-existence between two or more ethnic groups generates cultural, social, and economic relations that are closer than those existing within an ethnic group in its entirety but spread out over a vast territory. For example, marriages and inter-ethnic contacts among Kachac, Jorai and Tampuan are frequent in Andoung Meas district, while intra-ethnic relations are almost non-existent among the Tampuan of the central plateau and those of the low plains of the Sesan. Similarly, but for historical reasons, the Brao and Kreung in Lumphat district exhibit special affinities, to such a degree that they define themselves as related to the same undifferentiated socio-cultural subgroup.[41] In short, if each ethnic group in Ratanakiri constitutes an original cultural group, certain differences within the same group – linked to geographic space, to greater or lesser isolation in the forest – clearly appear more marked than the differences between neighboring ethnic groups, which co-existence, marriage, commercial exchanges and services as well as linguistic borrowing tend to diminish.

Among the Tampuan of Ratanakiri, according to the criteria of indigenous classification, two *de facto* endogamous subgroups of unequal size can be distinguished: the so-called low Tampuan,[42] who are the most numerous and who live in the center and to the

east of the plateau (Ban Lung, Lumpath, Ou Chum, and western Bar Kaev), and the high Tampuan, who live in the eastern foothills of the plateau and in proximity of the valleys of the fluvial basin of the Sesan, dispersed in the districts of Andoung Meas, Veun Sai and eastern Bar Kaev. The former practice land clearing almost exclusively, while the latter devote themselves to irrigated cultivation, while preserving small clearings in the forests adjacent to their cleared parcel. The low Tampuan make another socio-territorial subdivision between those who live in the area of Ban Lung and its immediate surroundings and those in the districts of Ou Chum and Bar Kaev. This relatively recent distinction – from the end of the 1960s – which may seem arbitrary, is connected, it seems to us, to the process of Khmerization that affects most of the villages neighboring the town (settlement along the road, employment on the plantation and in town, more frequent and sustained contact with Khmers, etc.). This indicates the respective desires of certain Tampuan to distinguish themselves from their homologues while affirming their intention either to remain close to a way of life closely linked to the forest or, on the contrary, to link themselves to the Khmer world. Integration/assimilation is encouraged by the benevolent policies of the provincial government, which has for some years given "diplomas" to fortunate villages docilely accepting modernization.[43]

Apart from these few acculturated villages, whose number is increasing, local social organization lies with the village (*shorok*), characterized by a grouped settlement and located by preference in the forest and not along the roads. The recent creation of higher administrative units, with the district and then the commune (*khum*) and its head (*me khum*), having under its jurisdiction three to five villages (*phum*) each of which has a head (*me phum*) designated by the government – but subject to the approval of the people –, has certain implications in regard to access to information pertaining to the intentions and directives of the provincial authorities, but this hardly changes for the time being traditional socio-territorial organization. The latter circumscribes for each village a territory with tacitly recognized boundaries on which each nuclear family clears a parcel in the forest for its agricultural needs. For one or two years, the cleared field (*miir*) is enlarged and certain portions of the original plot are abandoned. At the end of three to five years, depending on the quality of the soil, the family entirely abandons the site and leaves to search for other land to clear. Formerly, the entire village moved every 10 or 15 years when the cultivated lands became too far from the settlement. This change could take place either within the region or outside it and, in the latter case, a new territory is physically and symbolically marked off in tacit agreement with the neighboring villages. If these movements have become less frequent today because of constraints imposed by the state, apart from in remote areas, it is nevertheless common to see collective displacement after a deadly epidemic or a number of inexplicable deaths in the same family. This is what happened in 1993 at Phum Kao in Bar Kaev District when, following about forty deaths (children, adults, elders) during a single

agricultural cycle, the council of elders resolved, after the failure of sacrifices meant to appease the spirits of the village and the forest, to move the village from its old site and to give it its original name, Shorok Paley. A succession of deaths is, in effect, interpreted as evidence that the spirits of the place no longer want humans to occupy their territor.[44] The metaphoric expressions of "hot" forest and the forest that "burns without fire" refer to the necessity for humans immediately to leave a place haunted by spirits little inclined to co-exist with human society.[45]

Such displacements are not an exception, but they do not justify the designation "nomad," which has often been given, and more than one Khmer or Chinese family moving from one house to another, from one village to another, can in no way be considered an itinerant group. Village migrations over long distances were the result of exceptional events in the past (war, political troubles, seeking new lands as a result of demographic pressure), and to a lesser degree in the present (a succession of deaths, conflicts, government decisions), but they do not constitute a feature intrinsic to indigenous conceptions. The image of a region in which groups circulate constantly and randomly in the forest - with men transporting their meager physical possessions on their heads, followed by women dragging along children in rags and livestock of pigs, buffaloes and poultry following along - is only the product of imagination that is, unfortunately, firmly established.

In fact, "shifting" agriculture as practiced in Ratanakiri is a stable practice, because families are conscious of eventually returning to a cleared space that has been abandoned.[46] It is thus a limited mobility within a defined space, subject to the approval of the forest spirits and the advice of the village elders (involving "respectable men" from each clan). Land clearing - a term that seems more suitable than burn-beating, forest agriculture or shifting cultivation – implies knowing how to manage the forest reserves in a way that preserves its agricultural potential and its vigor by regeneration within a well-defined spatial boundary. Moreover, we have already drawn attention to the close tie between village socio-spatial organization and the territorial dispersion of land clearings within the village territory: the first serving as a reference for the second. Now, for the system to function in a coherent way, that is, for this projection of social order in the process of domestication of nature to be realized, a relative permanence of the zone of group habitation is essential, since without it the epicentre would disappear, from which not only the village territory is perceived – with is relations, discords and family histories – but also the ordering of the landscape and cosmos. In this sense, and contrary to true bands of nomadic hunter-gatherers still existing in Malaysia (*orang-asli* in the center of the main island), to which can be added a few forest horticulturalists in Thailand (for example, the "Spirits of the Yellow Leaves"), the Tampuan, like other groups in Ratanakiri, are rather semi-sedentary or almost sedentary in some places, inasmuch as their villages have been there for 20 years.[47]

This point being granted once and for all, it suggests that ways of developing land and the regularity of its use cannot be understood in terms of instability or mobility of settlement. This mistake was made by the authorities in the 1960s by thinking to make cultivation sedentary (the creation of flooded or irrigated rice fields), and thus to direct the villagers towards new ways of occupying space, solely by forcing the people of Ta Veng district to settle definitively in "re-population zones" (i.e., river banks). However, the Brao and Kreung villages concerned, little inclined to riverbank farming (*chamcar*), continued to clear land, but as their hamlets were concentrated and located in single file according to the Khmer conception, there resulted a more intense deforestation of the undeveloped adjoining forest belt. Deforestation - and it cannot be denied that the ultimate responsibility lies with the local populations - remains no less the consequence of a rash government initiative.

The socio-territorial layout of the village and its territory corresponds to an elaborate social structure. Each *shorok* is composed of several exogamous clans (*omey pong*), themselves composed of several non-hierarchical lineages. The spatial organization of a village reflects in a remarkable fashion the social organization by lineage, allocating a precise portion of the inhabited space to a group belonging to the lineage. At Phum Chon, where five clans of unequal size co-exist (*Pong Ting, Trao, Klaong, Romam, Kwa*), each lineage – in this instance, with one to five in each clan – occupies one of the eight cardinal directions[48] in a symbolically demarcated space. Each residential unit, identifiable in this way, is composed of one or several houses, the members of which have the same name. One unit generally includes a main house inhabited by the parents, elders and young unmarried daughters, and small separated or contiguous houses where young single men live after puberty, as well as married daughters with their husbands and children. Other members of the extended family can join them, notably when a couple has been decimated by illness or when a young or elderly person is alone. Certain groups of houses can thus include as many as forty people. In more remote Tampuan villages (Andoung Meas), the settlements are larger and clans occupy a longhouse (*heyding*) extending as much as 30 meters in length and five or six meters in width.[49] A residential unit constitutes a socially, economically, ritually and politically independent entity, and it is only on the occasion of large annual ceremonies that all these units find themselves together, reaffirming the social cohesion of the village, only to separate again at the approach of the rainy season and the new agricultural cycle. This group of houses is called *moin kwa moi oin,* "one pan for one house," which means that the individuals can share food every day, even if in reality each nuclear family has its own household within the large house. But whether or not married couples share the same house and take their meals together, it is no less the case that each household has its own store of rice and performs individually the propitiatory ceremonies in its respective fields.

Clan structure is important for the position of the individual within the community, but the social unit of reference in the village as well as in the field remains the nuclear family (*omey kanta*). A young couple, whose average age at marriage is 20 to 22 years for men and a little less for women, does not immediately acquire independent status. They must prove their ability to cultivate their own field, thus to carry out the various agricultural activities by themselves, including felling trees. They must also be in a position to make sacrifices to the divinities and organize festivals. There follows a period of apprenticeship of from two to three years, during which the newly married couple cultivates together the parents' field. However, this is not a strict rule, and the family context can counterbalance and nuance the individualistic tendency of nuclear families when, for example, parents are aged, impotent or overworked (which is quite rare!), or temporarily unable to do the fieldwork independently (illness, handicap, etc.). The diversity and flexibility of family structures compensates for the nuclear division of socio-economic production units, which, in their turn, are reinforced by a system of mutual aid and exchange of labor, as much within the lineage as among families from different clans but united by ties of marriage.

Tampuan society has a matrilocal, monogamous and matrilineal system. The more daughters a family has, the larger the house and the more it gains prestige. Kinship nomenclature is classificatory: men and women of the same generation of the same *pong* call themselves brother and sister and any sexual relationship, considered the most serious incest, is strictly prohibited within this social unit. Similarly, classification by generation supposes that there is only one term for each of the grandparents (*ya* for women and *wo* for men), and the same for grandchildren (*chao komek* for small girls and *chao n'gan* for small boys). Outside the clan, alliances depend as much on the choice of the parents as on that of the youth, who do not lack occasion to influence their decision. Preferential marriage exists between cross cousins in the first generation (the oldest son of the mother with the youngest daughter of the mother's younger brother). The possibilities are, nonetheless, varied, and strict prohibition is made especially only against marriage between the son of the mother and the daughters of the mother's sister (given their affiliation with the same *pong*). After marriage, which is not, moreover, an indispensable requisite for an official union and the possibility of having children,[50] the young man takes the clan name of his wife, goes to live with his in-laws, and must from that day on venerate the ancestors of his new family, without, however, abandoning his own when family events summon him for a funeral ceremony or for a grave illness in the house of his biological parents. The mode of uxorilocal residence is not definitive, and pertains especially to the first two or three years, until the couple has at least one child. After that, they either remain in the communal family house (the most frequent case) or they decide to live beside it, or they live with the husband's parents, or they distinguish themselves from their reciprocal family by building a house in a corner of the

clearing of the residential unit. It is not rare for quarrels or problems of incompatible temperament to change what has less to do with an inflexible social order than a tendency that is not only a matter of reproducing the socio-familial framework over the generations but produces internal changes, as is illustrated by villages located around Ban Lung where settlement is systematically atomized, not only in contact with Khmers and "external civilization", but because of changes in their relations to the cultivated earth (nearer the village, necessitating less prolonged absences). This modification entails, in its turn, a change in the mode of settlement practiced in the village. Whether the residence is matrilocal or tends to become patrilocal, the constraint of the system (limited intimate life, emergence of conflict, etc.) is considerably mitigated by periodic dispersion of the family group in their fields, a scattering that can last for more than half the year. This nuclear breaking up is favorable to maintaining harmony within the family and the more extended social group. It shows how certain cultural practices (land clearing on individual plots) tend to facilitate the adhesion of a village social system both structured and flexible, which, in working conditions that are more coercive and collective, would be more difficult to maintain.

If one of the two partners dies, the children remain either with their surviving mother or, if it is the mother who dies, with the maternal family. Numerous stories in the village recount the strife that occurs when widowed husbands who wish to keep their children come into conflict with the irrevocable right of the in-laws, who consider the progeny as their own: the married man being no more than an extra member in a matrilineal system. Apart from abduction, the only solution for keeping his children is for him to continue to live in the house of his in-laws and to remain a widow, unless he marries one of the younger sisters of his wife, or in their absence, a niece.[51] The wife retains the right of ownership over the house, domestic animals and various possessions, including prestigious objects (bracelets, copper gongs, metal vessels), and it is she who transfers her name to her children. Ownership appears quite symbolic, since the gongs that supposedly belong to her absolutely cannot be used by her. She retains only the privilege of giving their use to the man who marries her. In the case of divorce, in which, as they admit privately, men can be as much victims as women, accumulated possessions apart from hunting weapons remain with the wife's family, including the recent harvest and the use of the field that he himself had cleared.[52] Male strategies are, however, effective on certain occasions because in reality the man does not easily accept leaving after being dispossessed in this manner. Claims can also give rise to conflicts and turbulence that mobilize the families of the two parties, then the village council and, finally, the nominal chief if no agreement can be concluded. Rights to the inheritance, however meager it may be, favor the mother/daughter relationship, with an advantage for the youngest. This rule of ultimogeniture is explained by the fact that the last daughter is the one who remains longest in the house and who profits from the pos-

sessions and honors accumulated from the marriages of her sisters. But more than physical goods, she benefits from the reputation acquired by the successive festivals that have been held in the house, prestige that accrues not only to the individual who creates it but to the rest of the family.[53] Being in some way the "reflection" of the house, she thus becomes *de facto* the person on whom the parents depend the most, who has the greatest responsibility in the house (that will become her own), and whose choice of husband will, as a result, be given more attention, since to him go not only the renowned gongs but also the prestige of the residential unit.

Under the impetus of various outside interventions, in particular initiatives of the village chief appointed and paid by the government to instill new ideas, the customary behavior respective of rules of transfer of goods is modified among some families, who try to share equally their possessions among all their children. This dynamic from the outside is reinforced by a dynamic within, when, as we have seen previously, the land becomes immobilized capital, that is, is transferred and divided, contrary to what occurs with land clearing, in which the notion of private ownership does not exist.

These briefly sketched social characteristics show a remarkably organized way of life, which is of course subject to fluctuations and changes – in particular with the introduction of the idea of ownership, of market economy and money (the Tampuan, like their neighbors, want to be paid in dollars!) – but its symbolic and material connection to the land is still strongly pronounced. One belongs not to a region or district but to a village, the territory of which is "emotionally" demarcated. No trace of a propensity towards nomadism, which would diminish any lasting attachment to space as experienced, is perceptible among the Tampuan. The land they inhabit and cultivate is the land on which their ancestors lived, and the name of the village where they live is the eponym of the person at its origin. Identity comes above all from belonging to a restricted territory, the modalities of development of which will be reviewed.

The context of the utilization of soils and forest – imaginary, potential and real ecological risks

The efficacy and reproducible character of land clearing, under certain conditions, has been demonstrated around South-East Asia.[54] When populations practicing swidden agriculture serve as a reference and model, it is not without overturning certain well-established opinions that supposedly argue the cause of the environment, opinions that are echoed by rural development projects in Ratanakiri (national and/or promoted by foreign organizations), when they propose to make this agriculture, which is perceived as being destructive and belonging to a past era, sedentary.

Among the necessary conditions for maintaining the agricultural system, two should be mentioned, which, although unanimously recognized, are not always analyzed dispassionately and do not always take local particularities into account. These conditions

are *low demographic density* and *forest re-growth.* In fact, these two criteria are the first to be attacked by the detractors of land clearing and the promoters of a new, alternative and viable development. Generally speaking, it is presumed that the low population density of ethnic groups is transitory, connected with deplorable living conditions, and that, taking into account hypothetical health and socio-economic improvements, the number of inhabitants will increase in a significant manner. They cannot continue to live and remain as they are.

Unfortunately, the absence of reliable demographic data, and consequently the impossibility of carrying out a projective analysis, is a serious obstacle to demographic knowledge of the Proto-Indo-Chinese. Censuses in Ratanakiri have been rare in the past and of uneven quality; in any case, they allow no dynamic vision of the population. Even if this lacuna would have been filled since the end of the 1980s through comprehensive surveys,[55] numerous beliefs relating to the prodigious fertility of families intervene to confuse the issue. The image of the noble savage cheerfully copulating in an ambience of debauchery still prevails. It goes without saying that this is only a reflection of the fantasies of those who create it. No scientific study on the indigenous peoples of Laos, Cambodia, Vietnam or Thailand has recorded the existence of such practices.[56] At the same time, it is not a matter of denigrating the essential role of a higher birth rate as a factor contributing to the rapid growth of population, but it must then be seen in conjunction with mortality rate and life expectancy if one wishes to obtain a less piecemeal view of the demographic situation. The projections undertaken by UNTAC (United Nations Transitional Authority in Cambodia) for the province during the electoral period depart from the nebulous to end up in the most farfetched of forecasts.[57] On the principle that population data by district are incorrect or under-estimated, they are greatly exaggerated with no regard for any valid argument: how can it be, comments the author, that there are only 9,368 Kreung in the entire province, whereas more than half (5,431) were counted in the district of Ou Chum? It must however be recognized that each ethnic group has its own territory and that such makeshift adjustments can only obscure the numerical reality. It is even more dangerous to assume, like the statements of a mysterious commentator reported by the same author, that most families began practicing abortion only after the fifth child. From this idea, corroborated by his own partial observations and partiality in the field ("I have actually seen many boys and girls in every village"), the analyst concludes once again that a family of five children is an acceptable point of reference for the province of Ratanakiri. Whence the demographic explosion that is threatening.

In the village in which we lived, couples in which the wives were around 50 years of age had on average between two and four living children (a sample of 147 families). Apart from the large number of deaths, it did not seem there was a tendency towards unbridled profusion. In most cases, the desire to bring a greater number of children into

the world than wanted resulted from uncertainty caused by a high mortality in the first years of life. A large majority of the women questioned are completely conscious of the additional work a horde of young children brings, and the idea that more progeny is perceived as additional hands for agricultural or domestic activities is not put forward. Even if they are not in the majority, nuclear families with only two children are not the exception. We cannot, in our turn, take these facts as representative, but they do demonstrate that one must remain prudent about the idea of unbridled growth. Serious studies done on ethnic mountain groups in northern Thailand similarly counterbalance the imaginary representations of a naturally high and uncontrolled growth rate.[58] The Hmong have the highest rate: 4.3%, but are far from representing a typical case since other rates vary from 3.5% for the Mien, 3.1% for the Akha, 2.7% for the Kamu, 2.5% for the Lua, 1.9% for the Karen (who represent half the total aboriginal population) to 1.1% for the Htin. On the whole, and in the absence of evidence to the contrary, a percentage of 3% natural growth for the mountain tribes of Thailand seems realistic.

Several observations that have already been made in other regions of South-East Asia, merit attention and can be applied here. In the first place, it is impossible to extrapolate an elevated natural growth in a locality, commune, district, or specifically a particular group, and apply this to all the populations of Ratanakiri. Cultural attitudes play a significant role in the maintenance or irregularity of natural growth, but local variations in the living conditions must also be considered. In the most remote places of the province, where no health service provides surveillance over epidemics of malaria or respiratory illness, a significant and lasting decline in mortality rates will not happen tomorrow. Moreover, the rate of natural growth for recently settled Khmers and Chinese is certainly not below that of the indigenous populations. The size of both long-standing and recent migrant families is often above six children. This is reinforced by a degree of stability and a relative security resulting from an infant mortalityrate that is clearly lower due to the health infrastructures in the capital, which are more easily accessible to Khmers and Chinese than to Proto-Indo-Chinese.

From these few reflections, it is suggested that there is no real foundation for the demographic explosion foreseen for Ratanakiri. If there is a risk of intensification of the population, it would be more apposite to link it to government policies, which foresee the arrival of several thousand Khmer families, than to the dynamism of aboriginal populations. As to the health alibi, it is still far from being able to topple the equilibrium between births and deaths.

The second factor necessary for an adequate practice of land clearing is to respect the period in which the abandoned parcel of forest is left idle. This period of time corresponds to a period of forest re-growth (the shooting of the stumps, essentially) or new growth of forest allowing, as its name indicates, the regeneration of the forest after the abandonment of the cultivated fields.[59] This factor is, moreover, closely linked to the

demographic pressure exerted on the cultivated ecosystem, because when the population increases, there is a risk that the period in which the forest is left idle will be shortened due to a lack of land. Among the Tampuan, when a family abandons its land clearings, the fields return to the forest for a variable period of time, ranging on average from eight to fifteen years. In any case, the site will not be used again prior to the appearance of secondary forest.

When the forest is being renewed, tree species draw nutritious elements from below the soil and permit their concentration on the surface in the biomass, which is thereby reconstituted (vegetation, accumulated litter). Exterior inputs, in particular the atmospheric fixation effectuated by numerous leguminous species, can also contribute to this restoration. Here also, the quantity of elements concentrated on the surface depends on the amount of burned biomass and thus on the duration of forest re-growth. This is more or less rapid, depending on the soils. Between the rich red basaltic soils and the sandy-clay soils of the plains of average quality, there are great differences, more or less empirically recognized by the villagers (levels of maturity of the vegetation, rapidity of growth of different plant species, the role of soils), and this would merit verification by agronomic analysis.

Land clearers know that after some years of forest re-growth, the competition between plant species for space and light is detrimental to grass cover, in particular grasses used for building straw huts that were so difficult to clear previously. This grass cover completely disappears after a few years (four to six) and gives way to suitable underbrush that can then be transformed into a cultivable field. From our own observations between December and May, a period during which families begin to seek new lands, the clearings are made in forest zones or where the tree level reaches at least eight to ten meters, which leads us to assume at least a dozen years of re-growth, depending on the edaphic conditions on the central plateau. There are notorious exceptions in Ou Ya Dav district where, given the natural poverty of the vegetation (napalm bombardments, defoliants, but also accelerated human use under the Khmer Rouge), Jorai families sometimes clear the savannah with *Imperata.* Similarly, around large Tampuan villages (more than 600 inhabitants), it must be recognized that the vegetation is badly, perhaps irremediably, degraded. These cases cannot however be taken as a constitutive feature of Ratanakiri populations. The same thing applies to a few places, found only very sporadically, that have excessively large clearings and consequent disastrous effects on the forest environment. Nevertheless, the major part of the region, beyond the environs of roads, is not subject to exaggerated human activities by land clearers. The villages are scattered, and their boundaries are sufficiently extended and do not overlap.

Referring to satellite images, the evolution of the percentage of vegetal cover in the province between 1985 and 1987 and 1992 and 1993[60] shows an increase of 174 km^2. In other words, this means that there was no intensive deforestation during this period.

Swidden agriculture seems to have mysteriously declined, which seems doubtful, if a vertiginous fall from 768 km^2 to 231 km^2 is to be believed, while secondary vegetation (brush, shrub savannah) increased. For such a change to be perceptible, it must be that former land-clearing zones were actually abandoned and not re-utilized for perennial crops, as has increasingly been the case since 1993 on the major roadways, when Khmers from the provincial capital purchased cleared lands from Kreung, Brao, Tampuan, and Jorai villagers.

Table 6: Evolution of statistical data pertaining to the vegetal cover in Ratanakiri (in km²)

Type of cover	Total loss	Total gain	Net increase
Paddy field	70	77	7
Mountain "crop"	4	1	- 3
Land clearing	587	165	-422
Plantation	0	34	34
Plains crop	0	1	1
"Woodlands"	83	431	348
Natural bushes	5	3	-2
Abandoned savannah	0	116	116
Grassy savannah	0	25	25
Marshland	8	0	8
Expanse of water, flooded forest	45	123	78
Total	802	976	174

Sources : Mekong Secretariat, LANDSAT-MSS & LANDSAT-TM, 1 : 250 000, 1993

The threat of destruction to the forest cover is no less present, and numerous ecological and environmental reasons justify the prohibition of cutting the forest or at least taking measures to safeguard certain zones[61] and limiting the definitive destruction of others. *The question is to know who is cutting these forests.* Viewing the situation objectively, it must be recognized that the responsibility lies with the inhabitants of the Cambodian plains who come to settle in Ratanakiri or who, at a distance, speculate on the fertile areas of the low plateau. The land monopolized by non-Proto-Indo-Chinese investors is a land definitively subjected to plantations, to cash and/or food crops or to settlement, and will never return to a forest state. This irreversible process does not appear among the populations of land clearers, except among those who, under the auspices of the government, undertake irrigated agriculture on the lowlands and intensive mixed farming on lands on the plateau. By way of comparison, a researcher from the Institute of Tribal Research in Chiang Mai (northern Thailand) goes so far as to claim that, thanks to the presence of tribal populations, the northern region has more forests than other regions of the country.[62] His remarks, which are completely applicable to Ratanakiri, although the living conditions and those pertaining to agricultural development are not the same,

draw attention to the fact, which is insufficiently taken into account, of the intrusion of migrants in the deforestation process of the province.

An additional reason for the decline in wooded areas is the arrival en masse of Malaysian and Japanese companies, which hope to obtain significant portions of land to plant oil palms. These investors, among whom notable Cambodians have insinuated themselves, come to a conquered territory with cash and in collusion with the highest level of the Cambodian government; connivances that promoters of provincial rural development cannot resist, even less the local populations who have nothing to say in the matter. The latter have neither the opportunity to know the tragic ecological consequences of the cultivation of oil palms on red basaltic lands, nor the possibility of combating the politico-economic compromises that are negotiated without going through their intercession. It is also a neat way for these companies, which employ cheap and effective labor for clearing sections of the forest (presently the Jorai in the district of Ou Ya Dav), not only to attribute responsibility to the villagers ("from the moment they cut, they accept and are accomplices"), but also to recuperate the wood thus cut for commercial purposes. The space on which the land clearers can practice swidden cultivation is already being reduced in certain communities, and this loss of land risks inciting the cultivators to shorten the periods traditionally granted to new growth. It is therefore a matter of an imbalance linked to external intervention, and not only to the behaviors of the local populations.

Another problem, the degradation of soils, is by definition a social problem, as has been noted and proved by Piers Blaikie and Harold Bookfield.[63] Purely ecological mechanisms, such as natural erosion or landslides, exist with or without human interference, but for these processes to be perceived as "degradation," it is necessary to introduce social criteria related to its factual or potential utilization. The deterioration is connected to a disturbance of nature provoked by humans. In Ratanakiri, contrary to the rest of Cambodia, where environmental loss is linked primarily to the illegal trade in wood, the deterioration of the ecological milieu is systematically linked to the destructive forestry practices of the indigenous populations. Here again, a great number of myths, which, it seems, have a universalizing tendency, falsify the facts of the problem. Following the drought of 1994, popular belief recalled that it was the destruction of the forest that reduced rainfall. This innocent affirmation is taken up as a pseudo-scientific argument: by maintaining humidity in the atmosphere, forests increase the volume of precipitation – and conversely. Soon, one will attribute to the land clearers not only the instability of the regional climate but also the irregularities of rains in a large portion of the country. Similarly, deforestation would favor floods in wet periods. It is once again the fault of the villainous tribes (the Kachac and Jorai) who cut and recut the woods along the upper Sesan. A scientific argument, nevertheless, totally pushed aside or at least counterbalanced, by forest hydrologists:

"The popular notion that forests retard and slow down inundations and prolong them during the low-water periods…was still in vogue among scientific forestry specialists during the mid-twentieth century. It is true up to a certain point that forests diminish "the submersions of the summits," but the greatest inundations registered have taken place in zones of drained forests… The appealing notion that the existence of the forest cover will prolong inundation during low-water periods is entirely false."[64]

Soil erosion is a burning question that cannot be disregarded. It gives rise to numerous concerns in Ratanakiri. When the French established more than 2,200 hectares of hevea plantations in the 1960s, they knew how to take into account the latest agronomic ideas, such as: plantations following the inclination of the slope, considering the location of lands, the density of 625 trees to the hectare, direct sowing trials, soil protection. What about the preservation of the basaltic foothills of the plateau, where gradients of more than 5% are cultivated? In the context of different soils, local references lacking, a study undertaken in northern Thailand on cleared lands (involving acidic soils, but also steep terrain) has shown a loss of soil estimated at 96 tons per hectare, or 20 times more than the "tolerable" loss. On flat alluvial lands, the loss is limited to between 12 and 50 tons per hectare. General estimates concerning erosion are one thing, and they have the merit of indicating the existence of a problem. However, studies on the precise causes of erosion caused by cultivation must offer a perspective that contains more than generalities, and take into account a whole range of data (type of agriculture, period of utilization, method and technique of cultivation, slope and soil type, granulation, etc.) Erosion is a permanent and natural phenomenon that appears in primitive forests as well as in secondary and/or human-made formations. The important thing is to measure the role devolving upon the people. In the absence (or at least unavailability) of scientific surveys conducted in Ratanakiri, it is important to recall that populations of land clearers are the first to be concerned with their own acts. Without comparing them to scientific ecologists, an empirical knowledge accumulated in the course of ages inevitably gives them an ethno-ecological knowledge allowing them to continue their way of life. Perhaps there were changes in techniques, changes that took place over the course of time and due to the constraints of the period (slavery, periods of instability, migrations and interferences); perhaps they are thus in a position to integrate, in their own fashion, the new imperatives dictated to them by the Khmers.

For these false problems, or rather real problems, the bases of which are poorly established, the solutions that are currently proposed are obviously biased, not to say truncated. They come principally in two categories. The first are directly formulated, while the second are not expressly stated, although they silently constitute the keystone of the system that the government wishes to put in place.

Explicit recognition includes the policy of displacement and sedentarization. This policy, the antecedents of which go back to the 1960s, has been partially initiated and is

meant to be expanded. The fluvial basins of the Sesan and Srae pok would be the privileged sites for its implementation. The lands where relocation is envisioned are of course not the best lands. There is little chance that the villages will be satisfied with them, inasmuch as they will not have what they have lost in terms of allotted space, quality of the soil, food availability, hunting lands, or even access to the capital for those who want it. A change in biotope necessitates the introduction of new agricultural techniques adapted to the plain; it is not only a way of marginalizing land clearing, without however, eradicating it, but also a way of modifying the socio-cultural organization of the villages by Khmerizing their agriculture. These transformations are supported by educational and health projects and, in the near future, by family planning: "It is absolutely necessary to limit the size of their families, otherwise they will overrun us," said a high-standing civil servant, who himself has more than six children.

Certain latent acknowledgements are, one might say, an open secret. Khmerization constitutes the first point. Integration is completely justified in the context of a pluralistic society, but in practice it approaches assimilation more than fraternal co-existence. The rights of minority populations are non-existent, and there is nothing that can protect them from the monopolization of their land or ensure their right to manage differently their mode of agricultural production.[65] The rejection of a form of life out of sync with the paradigm of modernization is patent in the discourses and actions of the decision-makers, even if some of them are inspired by the best intentions and claim to work for the good of the people. It is said that ignorance and misery drive the indigenous people to perpetuate an outdated way of life, from which they are the first to suffer. As to culture, taken in its narrow sense, it is agreed that it is necessary to preserve objects, crafts, dance and songs, to show from time to time a sacrifice during a tourist presentation. But can one detach the parts from the whole: conserve this, reject that? What do the magnificent "a cappella" songs, which the Tampuan women secretly dedicate to nature when they clear the undergrowth, mean out of context? Standardization is easier to plan and promote than toleration of difference. What is more, and this is the second point, under the pretext of regional security, it involves controlling the populations, knowing exactly where they are. The alibi of security and control justifies their concentration in settlement zones located in easily accessible places. As a result, and this is the third important point, these population displacements make available exploitable lands that, we recall, are among the most coveted in the country.

Wishing to change the ecosystem (social and natural) of the populations in the low plateau goes hand in hand with readjusting their cultural practices. This established fact leads us to the problem of the relations of people to their environment. Before changing anything, it appears judicious to focus on the sense and logic of the system of land clearing, which is the object of so many ills. This competence is not only part of the cultural heritage of the Tampuan and, if only for this reason, merits being catalogued.

It can also be envisioned from the perspective of its viability, in order to foresee the potentialities of participation by local actors in their own development project as well as the contribution they can make to knowledge of local ecosystems.

A knowledge of nature paired with a detailed technical itinerary

Land clearing is a useful process that makes it possible to develop soils of very diverse quality and of irregular relief. In the absence of irrigation and drainage of rain water, it constitutes one of the best methods for developing spaces that are not very accessible[66] and where permanent cultivations would require enormous means, difficult and indeed unthinkable to realize. It necessitates minimum technical equipment, without draught animals, carts, or bulky tools. The range of tools is most often limited to the indispensable machete *(mok)*, axe with handle *(kal dong)*, long handled curved knife *(chaenouth)*, and digging stick *(romol)*. During sowing, the surface of the cleared land is neither turned over nor plowed. No outside fertilizer is added, other than the ashes of cut and then burned wood. The Tampuan adhere always to the idea that the clearing they have made in the forest is temporary, and that its evolution is to return to a state of nature. The cultivated clearing is called *miir*, and once abandoned, it becomes *chi-umpar*, that is, land on which young trees grow, until it is again *pri kara* (*pri* = forest and *kara* = mature), forest that can be cleared again.

However, it is not the land clearer who is in charge. There are multiple obligations , like watching over the field and the need for a village society to disperse during the course of the agricultural cycle. Certain agricultural operations are physically trying (cutting trees, repeated clearing and weeding), and sometimes dangerous (setting fire to the parcel, a tree that falls). The labor that must be provided by a Tampuan practicing swidden agriculture is greater than the time and energy spent by the rice grower in the Cambodian plains. Jean Delvert mentions that, attended to expeditiously "à la cambodgienne," irrigated rice demands in some places a maximum of 60 days of labor per hectare per year: 10 for two plows, eight for the nursery, 18 for bedding out, 10 for harvesting, and 11 for threshing, transport and storing. A family of five persons with two to three hectares therefore works for 120 to 180 days for a very average production.[67] A monograph on Siem Reap reports only 15 days of labor in the flooded rice field for one family of the same size per year and per hectare.[68] These are certainly extreme cases, but they do not have their equivalent among land clearers. A study conducted in Ratanakiri among the Tampuan stipulates an average of 190 days of work a year,[69] while that of Jacqueline Matras among the Brao unfortunately provides no information on this subject.

While a rice field includes only a few varieties of paddy, a cleared field is of an agricultural wealth and variety at least equal, if not superior to the *chamcar* (mixed farming along river banks) of the Khmers and Laotians. The appearance seems less ordered, although there is logic in the choice of location and spacing, and it evidences a remarkable agronomic diversity. Rice dominates, but co-exists with tobacco, cotton, indigo, corn, manioc, millet, sesame, garlic, several types of sweet potatoes, gourds, cucumbers, watermelons, melons and other *cucurbitaceae*, small eggplants, kidney beans, pimento, sugarcane, castor oil plants, tomatoes, a number of *Zingiberaceae* (including cooking ginger), Chinese yams, amaranth, taro, cashew nuts, lemon, tamarind sugar, several types of bananas and mangos (notably the *sway cianti* variety, which is in fact the cashew nut, but is classified in the vernacular system as part of the mango family), pineapple, grapefruit, kapok, papaya, orange, citron - not to mention the many local plants used for cooking, domestic, craft, medicinal, ritual, dyeing, decorative and aesthetic (flowers) purposes, along with several majestic bamboos in the lowlands. Each land clearing is differently constituted, favoring a given crop; there are, all the same, at least thirty different products on a plot cultivated by one family.

In Ratanakiri, the preparation of rice is a female domestic activity par excellence and requires a minimum number of hours in the daily life of every woman. Husking the paddy is done either by pounding or, more rarely, by passing it through a mill with horizontal arms. In the latter case, standing and portable mills are made of wood from the longan tree driven into compact clay. Polished rice is then obtained by pounding by foot (blanching the grain deposited in the mortar). It is then winnowed, using a large woven tray. The cooking is done with a small amount of water and burns a crust that remains attached to the bottom of the cooking pot (Tampuan). The crust can then be boiled again to produce brownish water that serves as a beverage. Rice is sometimes steamed (Brao, Kreung), which requires a more complicated apparatus and more time, a cooking pot for boiling, a basket, a wooden sleeve for directing the steam toward the basket, and gaskets to prevent the steam from escaping. During the rainy season, when the bamboo shoots are new, rice is put in a tube of bamboo that is placed in a sloped manner directly over the fire. Women, particularly the Kraveth, add only a little salt; the grains swell with the water contained in the bamboo, yielding an aroma and an unequalled flavor, the tasting of which justifies its having only one mission on earth.

The different agricultural operations that will be described follow a chronological order, which is always respected. The first work of the agricultural cycle begins in the form of discussions in December/January, but more definitely in February with the search for a site, and finishes at the end of November/beginning of December with the harvest. The agricultural season begins during the dry season and is completed after a lull in the rains. There is no precise date, as in other societies (India, for example[70]) when the lord of the land decides for the entire village the day of the first sowing and of the harvesting. Every family among the Tampuan has a margin of freedom and decision making, within the limits of climatic conditions, in the organization of its work schedule and the management of its field. This fact, which they often mention, is more

than a perceived advantage: it is the expression of a way of life in which the relation of time is not experienced as a constraint but as a "predisposition," where the work is not an end in itself, an inescapable necessity, but a way to comprehend life and enter into a continual relationship with the natural milieu that surrounds it. When a festival occurs in a village or a field, nothing prevents one from going there and putting off a job that had already begun the previous day. In addition, the notion of a man setting out alone to the forest or to his field, overwhelmed by hard labor and a trying and dismal life, is definitely opposed to reality.

The search for a site within the village territory

The choice of a site takes into account two considerations: a physically suitable terrain and a place where the spirits of the forest accept the intrusion of humans. These two considerations would seem to be independent, but they are in fact one. The logic of the Tampuan system of thought does not discern nature as an autonomous sphere in which the presence of people is only perceivable through the knowledge they possess about it. Our naturalistic view prevents us from thinking that the phenomena unfolding in nature are closely linked to the actions of humans.[71] Now, in the indigenous cosmology, a continuum exists between human beings and other beings of nature (spirits of the forest, vegetation, minerals) and the life of one cannot be lived without establishing a relation with the other. What is more, any terrain that can potentially be cleared, even if other prohibitions affect it, is a place peopled by supernatural entities who participate in the ordering of the world, its arrangement and its fertility, while the spaces on which clearings are not envisioned (those covered by open forest or savannah, for example) are, on the contrary, devoid of any "supernatural" presence, and are consequently unproductive.

Decisions related to an appropriate site are absolutely not the result of chance and are the subject of lively discussions that sometimes involve not only the family concerned but "respectable men" *(kra* or *jha phum)* of their clan or, in the case of indecision or disagreement, the head of the village. At Phum Chon, every residential unit, as we have seen, locates its cleared fields in a perimeter, the orientation of which is a function of its spatial position in the village. This is the initial framework (lineage territory within village territory), only disregarded on rare occasions and within which each nuclear family chooses its own site. There follows a connection of land clearings belonging to an extended family: to the spatial proximity of individual houses *(mon hoy)* gravitating around the main house *(mon kwa mon hoy)* within the residential unit corresponds thus a spatial proximity of land clearings of these same nuclear families belonging to maternal lineages. The individual *miir,* rarely of one holding, are clearly separated by bushes, forest, a group of thickets or a bamboo stand, thus lending the agricultural landscape a particular configuration in the form of clearings in the forest cover. Each house

of the *miir (pak poo miir)* thus constitutes a place of passage and sociability where families can stop, rest, refresh themselves and converse; in the same way that the neighborhood facilitates mutual domestic and agricultural aid when certain operations must be rapidly accomplished (burning, weeding, etc.).

The forest contiguous to and surrounding the village *(pri kiom kiom choraux)* - where the animals go to graze, where the women and children gather various products of nature, and where the cemetery is also found - is however exempt from any cultivation. The land clearings are situated beyond this traditionally "protected" zone, extending over a radius of 600 meters (in the case of Chon *phum*). This forest security barrier is found in most of the villages on the plateau, at least if the reduction or limitation of the available territory does not compel the villagers to move into it: phenomena that appear mainly in the Tampuan settlements located along the trails suitable for motor vehicles or near lands held by Khmers.

Each year, two solutions are offered to the peasant: to abandon the *mirr* and search for a new site, or to continue the field by, if need be, enlarging it (going farther). In the first case, certain prior conditions are taken into account. The land, irregular or not, must belong to only one tenant.[72] Ideally, a water course is nearby (for domestic use), but in no case should the latter cross the cultivable perimeter belonging to a single family. The river - or its dried bed - is considered, on the contrary, as the boundary that serves to establish the demarcation between several fields. The places reputed to be the dwellings of spirits (hilltops, a few large identified trees, outcroppings of rocky foundation, etc.) are avoided. A regular flat terrain *(te tamplang)* is preferred to a sloping terrain *(te charang),* but not everyone profits from it because of the general configuration of the village territory. Lands with a steep slope are less appreciated because they are harder to work, thus they constitute a second choice. Swampy lowlands, zones of continuous grassy cover and enclosed thalwegs are also put aside. The apparent texture and composition of the soil are important and sandy, swampy and predominately clay sandstone zones are passed over in favor of the red soils that prevail on the plateau. The more the basaltic soil is decomposed and fine, the more it is sought. Arenaceous relief, on the contrary, is judged unfavorable. In the ideal of local conception, fertile land is above all land covered with a forest where inferior and average shrubby strata are nonexistent or, lacking that, are reduced to a minimum. In reality, the choice of a spot is also conditioned by tradition, which dictates that lands developed by the ancestors will not be abandoned. The Tampuan, like the Kreung, will choose again the land formerly cleared by their ancestors.

The search for land is not without thought or undertaken at the last moment. During peregrinations in the forest, there has been time to compare several places and to mark out a site that appears to be adequate. Prior to definitively establishing the location, it is important to be certain that one is not acting counter to the spirits of the place. In their

essence invisible, the spirits can assume the appearance of an animal or take on a human form in dreams. Also, a common ceremony performed in order to receive a sign from them consists of clearing a small section of forest (a few square meters) and waiting until the spirit(s) manifest(s). There are several possible rituals that can be performed: either a man sleeps alone on the cleared portion of land and his dreams will tell him whether he should forsake the proposed site, or indeed take it into possession, or a small receptacle (coconut, etc.) filled with rice grains is placed on the small clearing to see if it is approached by the spirit. An overturned receptacle will be a bad omen and will compel the man to seek elsewhere. These acts, together with divination techniques, can take place on several occasions. Once the pact has been concluded (to establish a site tacitly means to commit oneself to performing several ceremonies during the course of the agricultural cycle), the new occupant drives a pointed bamboo stick into the ground with a leaf affixed crosswise as an indication to the other villagers that the location is reserved.

The size of the cleared area depends on the number of persons whom the crops will have to feed. In this respect, the Tampuan evidence a remarkable aptitude to plan an area adapted to their subsistence needs, perhaps with a view to obtaining a small surplus to sell or exchange at the market. In any case, an expanse that is too large would demand additional work, something the families are concerned to avoid. The dimension that is chosen cannot be generalized because it depends on the perceived quality of the soil, the rice varieties that will be planted, and the other crops that are foreseen. Taking a family with five members as reference, it is always rare to find cleared lands, the *actually cultivated* area of which exceeds one and one half hectares. In general, the cleared area in the first year corresponds to at least 90% of the area one wishes to utilize, without counting the vacant space required for the house located at the center of the clearing. The remaining 10% can be relinquished, either for reasons of unproductiveness, or so as to stack the boles and trunks that did not burn.

The preparation of the field

The felling of a new forest parcel represents the longest and most arduous work. Although perhaps not the most laborious for the Tampuan, who prefer a strenuous effort, this work is very prestigious for the men as it gives them an opportunity to display their virility, and they prefer it to a chore that is tiresome in its monotony, such as weeding, which they willingly leave to the women and adolescents.

Prior to any clearing activity, the Tampuan family must symbolically receive the usufruct of the land. This is the *changkal miir* ceremony, which is intended to appease the spirits of the forests, to ward them off and to preclude that accidents occur when the trees are being felled. An animal is sacrificed, a jar of beer is opened and members of the extended family and friends are invited, should the host have enough to sacrifice

in order to feed and provide drink to his guests. The ceremony is equivalent to the "inspection of the forest" described by Georges Condominas among the Mnong Gar, although among the Tampuan this would be a private and not a collective matter.[73] *Chen miir meinjarr* literally means a prayer, a field, a reserved place. Several invocations dedicated to the ancestors and the spirits are made to inform them of the human intentions. The spirits of the forest are requested to move farther off and not to thwart the human projects. Thereupon, the parcel is marked out by making notches in trees while placing green branches crosswise so as to *signify* the place. This ceremony is followed by an interdiction to cut trees and to work in the fields on the next day.

The land clearing is more difficult on red soils covered by dense forest than on bamboo groves. It is practiced among the Maa de Blao in Vietnam. But the bamboos shoot quickly and demand numerous weedings. There are several techniques of weeding. The Lau and the Karan only lop the branches off the trees and use the site but once. The Moros of Laona in the Philippines cultivate on the "cogon" (*Imperata*) savannah: the grass is cut, burned or buried, after which the rhizomes are disinterred by harrowing, rooted out and burned. What is original for a land clearing is in this context a dry planting subsequent to tilling with a yoked plough. The Tampuan in Phum Chon proceed differently. The vegetation, comprising for the most part established ligneous phanerophytes, is cleared in several stages. The shrubs that are still green are cut up after the rainy season, when the task is easier. The biomass that has been cut is dried and a protected area of some three meter's breadth is made. This will serve as a firebreak intended to protect the adjoining forest. The large trees are then taken on; they are never cut level with the ground, but at a height of one metre or one and one half meters. The stumps are not uprooted and their shoots will constitute the main mode of the new growth of forest. This is a crucial aspect because the disappearance of trees with powerful rooting would mean that there would be less transfer of mineral elements from the deep layers of the soil to surface strata; the fertility of the latter, as Marc Dufumier[74] has noted, would thus be diminished. It would however be difficult to do otherwise in the case of numerous trees with foliated bases. Scaffolding made of bamboo or of felled trees secured with rattan is erected around the bole. The felling period extends from four to eight weeks with numerous pauses. There is no need to hurry and the men have from the end of December until the end of March to complete this work. No other agricultural activity takes place during this period, except the gathering of tubers and the uprooting of manioc in the old cleared fields. The beginning of the felling most often takes place in a cheerful atmosphere: the days are not too hot, it is the time for festivities in the village and the recent harvest provides ample food. Feasting, rest and work – in which men, women and children take part – succeed each other, and the solidarity between villages is particularly heightened during this period.

Let us note that part of the biotope is preserved. The fruit trees, if there are any, stem from a former land clearing. The charred trunks are sometimes collected in the middle of the field. Termite mounds are also never touched and some plants, notably tobacco, are grown there. The termites modify the structure and composition of the soil by going down as deep as ten meters, and the Tampuan are quite aware of the benefit to be derived from them, even if they do not know the exact ecological reasons.[75]

After the clearing and felling, burning constitutes the most difficult moment. It takes place two or three weeks after the cutting. The wood is then more or less dry and the unexpected arrival of rain can result in serious delays. For the same reasons, a partial burning risks compromising the adequate preparation of the field. The promise of a good harvest will depend on the successful execution of the fire. Because the land is not managed, dunged or otherwise improved, the effect of the flames is crucial. First of all, the burning cleans by eliminating a good part of the seeds of self-propagating species that are still present in the upper layers of the soil. It also destroys parasites (insects, larvae, worms) likely to damage the seeds that will be sown. What is more, the patches of burnt land provide a natural fertilizer because they free ashes that supply a quantity of nutriments and mineral elements (phosphorus, potassium) that will be mixed with the soil at the first rains. What the fire destroys of acidic surplus organic matter, it restores in easily assimilated bases. Jean Boulbet mentions that elsewhere (Mondolkiri, central plateau in Vietnam) chemical analyses show that, all conditions being equal, the soils of cleared fields having been subjected to fire and to superficial erosion are distinguished from the surrounding forest soils by a good proportion of exchangeable chemical materials and by a significant gain in potassic bases.[76]

The fire takes place during the most stifling days of the year and without significant ritual ceremony, with the help of relatives and neighbors. One waits until early afternoon, when the nocturnal humidity has dispersed. The edges of the forest are cleared a bit more so as to ensure an effective firebreak. Although in Phum Chon, as far back as their memory reaches, no one can recall a fire having gotten out of control, tension can nevertheless be sensed in the team that has been mobilized. Finally, the fire is lit at several spots, depending on the direction of the wind, but it is thought to be better, when conditions allow, that the fire spreads from the periphery to the center. An immense brazier bursts into flame with amazing rapidity. The five or six persons present are spread out at regular intervals around the parcel. At the end of the day, the smoke from the fires gradually dies down and the participants return to their homes, covered with soot. At moments reassured by the good course of the operation, they are at times crestfallen at the difficult prospect of having to rekindle small fires in places that have not fully burnt. An interdiction to work will be respected the next day.

The day on which the burning is done is a key point in the agricultural process. Not only does it capitalize the beneficial effects of regeneration accumulated during the long period of abandoned land and the efforts made in the short period of preparation of the *miir*, but it contributes to the indispensable enrichment of the soil. A patch of land that is badly burnt, felled trees that are only partially consumed, mean additional hard work that consists in collecting the unburnt and half-charred branches in small piles around holes that remain to complete the burning.

Cleaning and sowing of the parcel

It is the end of April or beginning of May. Once the ashes have cooled, the family proceeds to complete the burning, should it have been partial, then goes on to the clearing of the land. Several ceremonies can take place, but the most important will be the unction with blood-soaked rice (or unction of the seeds) that consecrates the end of the preparation of the *miir* and the beginning of the germination of the rice.

The different *miir* parcels are carefully examined to decide the distribution of the cultivated species. First, the locations that are not very cluttered with large deposits of ash are identified. These are in fact considered as privileged and fertile places, for the same reasons as the areas around the termite mounds. After these have been thoroughly cleaned, spaces are reserved for various tubers, garlic and grains. Small holes a few centimeters deep are prepared in which the seeds for these crops will be deposited. Manioc will most often be planted in two parallel lines that serve as a shady path leading from the entrance of the field to the house on the cleared land. Maize, sesame, numerous cucurbitaceous varieties, vegetables, fruits, tubers and sweet potatoes will also be planted at this time, just before the sowing of rice, nearly everywhere in the field. A few places with differentiated edaphic particularities are reserved for additional crops: pineapple, cotton and manioc. On lower, humid levels, taros, jackfruit and other fruit trees will be planted. The felled trees deliberately left there, as well as the stumps, will serve as stakes for numerous climbing plants and creepers (cucurbitaceae, beans and leguminous plants).

Then comes the sowing of rice. The land-clearing groups in Ratanakiri collect different varieties of rice.[77] In their relations to other ethnic groups, they have over the course of history exchanged seeds with which they were not familiar and experimented with them on their *miir*. This is the case with the *kraveth* variety, which takes its name from the ethnic group that obtained it. It should be noted from the outset that such a conception of diversification is opposed to any idea of exclusive use of a limited number cultivars chosen for their high yield in optimal conditions.[78] The different categories of rice are subdivided into early and late varieties. These enable the period of harvests to spread out (end of August to the beginning of December). The early varieties also make it possible to bridge the gap. Each variety also corresponds to a more or less preferred consistency and flavor. Some fifteen varieties have been counted among the Kraveth, while Jacqueline Matras listed some forty varieties in her Brao village. Nevertheless, the

Tampuan in Phum Chon at present only avail of five varieties, although they would be able to name three or four times as many: three are early (*kreung, yoeuln,* and *kraveth*) and two are late (*vang* and *chaengeut*). To these can be added the sub-variety of *chaengeut*, which is rarer and called *lechang*. Each variety of rice will have its location in the cleared field, depending of the soil qualities, their texture and also the year in which the patch of land is cultivated. For example, one of our hosts who had four varieties sowed three of them in the first year: *vang* in the north-west (the north corresponds to the elevated part of his sloping field) and in the south-west, *kraveth* in the north-east and *kreung* in the south-east. The second year he added *chaengeut* in the south-east, while reducing the proportions: more late rice, which according to him has a better yield and "feeds more". *Vang* is clearly the most valued because it is much softer than the others and its distinctive taste has made it popular in all households. On the other hand, *vang* requires more abundant and regular rainfall than the other varieties. Thus, while it is the preferred crop, it is also the variety that is most subject to vagaries.[79]

The distribution over time combines with the diversity of chosen varieties to increase the chances of having a sufficient harvest, despite adverse climatic conditions comparable to those in 1994. One of the reasons for maintaining several varieties is therefore to obtain rice with varying maturities.[80] This year (1995), if the late varieties are subject to damage because of the lack of rain after September, the early varieties will have received enough water in July and August to provide an adequate harvest. At the same time, if there should be an excess or deficit of rain for the early rice, the maize spread sporadically over the entire cleared field will serve to supplement the coming loss of harvest of the first rice varieties. Pierre Gourou, observing that rice growers were not bound to the seasons, contrary to land clearers, perhaps too hastily generalized,[81] in view of the setbacks last year of the rice growers in Ratanakiri who, having experienced serious flooding, were forced to work as day laborers for the land clearers, who apparently managed much better.

The parcels of *miir* that have just been cleared are those with the greatest agricultural diversity (rice and other crops). The early varieties are given priority on new parcels, while rice with a longer maturity – *chaengeut* and *vang* – grows more easily on cleared land in the second year. In the absence of climatic constraints, better yields are expected on the old lands (second and third years). The same use is current among the Brao, as observed by Jacqueline Matras. The distribution of crops in the first year is in fact adjusted, depending on past production, while more resistant varieties, such as *chaengeut*, which are less profitable but adapt better to impoverished soils, are reserved for the oldest cleared lands.

Each nuclear family has its own seed reserves stored from the past year in the loft of the house on the cleared land. Rice can produce several spikelets for one seed, which is important for the land clearers in Ratanakiri, who have only meager surpluses and judge

their harvests less according to the yield per area than by the multiplication of planted seeds. The sowing period can extend, from one family to another, over the month of May and constitutes a neuralgic point. A complete system of meteorological forecasting is elaborated for this event: the ideal is to sow just after a shower, by which the ground is loosened, and in the absence of a later period of persistent drought that would destroy the emerging young shoots. At the same time, certain taboos prevail so as to prevent people, through their behavior, from disrupting the progress of time and the seasons. Here again, the social order and the order of nature are not conceived of separately and the degradation of the former runs counter to the smooth functioning of the latter.

After the sacrifice for sowing, which consists mainly of libations to the rice seeds and to the tools, a day of work prohibition on the *miir* is respected. The time for sowing is the result of a collective decision by the family. The planting takes place quickly, done as teamwork, using digging sticks to make the seed holes. The absence of plowing facilitates the activity of the mesofaunae, beneficial for the permeability of the soils (earth worms, termites) and prevents land being broken up on the surface, which would be more liable to erosion (wind, leaching, etc.), which is particularly menacing on the hilly and sloping lands in the center of the province.[82] Setting out from the top of the field, each man has two sticks of two meters, the lower points of which are conical, and drives them approximately five centimeters into the ground. The holes are spaced about twenty centimeters apart and follow parallel lines that are from 22 to 28 centimeters apart. The women follow the path of the men, bent over and provided with bamboo tubes as containers (one for each variety), depositing a handful of seeds (eight to 12) in each seed hole and covering them immediately with a little bit of earth. The sowers, whose work takes longer than that of the men, proceed from one variety to the next. It can happen, as I heard in other villages, that several varieties of seeds would be mixed, on condition that they required the same period to ripen. At the most, one day is required to sow all the varieties of rice on a family parcel. Only those who do not have recourse to help outside the family will have to resume the work the following day. If not, the same mutual aid team will go the next day to repeat the same operation in the neighboring *miir* of another family in the residential unit.

Overseeing the crops and the harvests

During the period around the planting of rice and other crops, the house on the *miir* is built, with an integrated grain loft. The craftsmanship of this house is remarkable: it is often more spacious, better laid out and maintained than the very different house in the village. The field is protected by a rudimentary fence made of branches acquired during the felling. Traps for small wild animals and enclosures and wickets for straying livestock are meticulously erected in the forest adjacent to the *miir* and around the house (for chickens, pigs).

Nutritive plants, particularly the *vang* variety, are sacred plants. Like the sowing, the time when the ears appear prior to the harvest includes several rites and interdictions. It is not only a matter of protecting the crops materially, but also ritually. The rice ceremony is carried out at two times. The first, *peu pra pirr kaun* ("ceremony of the young rice shoot") takes place in the ninth month of the Tampuan year, that is, the seventh month of our solar calendar, when the paddy stalks reach some 50 centimeters. At this time, the stem is growing very rapidly and the paddy begins to ripen, notably the *vang* variety. The plant is sprinkled (fertility rite) and its soul is retained by food offerings (chickens, rice beer, etc.) as well as by fastening unbleached cotton threads to the plant. The second, *peu pra pirr play* ("rice harvest ceremony"), is performed just before the harvests come to an end.

As soon as the maturation of the paddy is observed, but before the definitive harvest, a few sheaves are cut to prepare *ambok* (roasted green rice). After the threshing and pounding, the rice is gathered and offered to the ancestors at full moon (*wouolokaé*). This ritual, described in other societies and found among both the Laotians and the Khmers, can be interpreted as an abundance rite. As it is harvested, the paddy intended for the *ambok* must be dried so that it can be well preserved. It is preserved in straw and then beaten against a block, sometimes threshed with the feet. These first gleanings of rice take place at the same time as the weeding in the fields; it often happens that the grass, even when burnt in early May, re-grows and hampers the growth of the spikes beginning in July/August.

After another diffuse gathering[83] done by the women, old people and children, comes the harvest properly speaking. The spreading out of the harvests, which depends on the various rice varieties sown, is a characteristic feature, as we have seen, of land clearing among the Tampuan and all the other Proto-Indo-Chinese groups. All of the rice is taken off the stalks by hand: the grains removed in small handfuls are put in a small basket (*chen houang*) suspended on a strap or at the waist, resting on the torso. When full, the small basket is emptied into a large one (*rréô*). Every stalk is delicately husked and there is practically no loss of grain (as opposed to cutting with a sickle among the rice growers). The harvest is not done uninterruptedly, but according to the rate of maturity of the *vang, chaengeut, kreung, kraveth* and *yoeuln* rice. However, after gathering the three early varieties, mainly by the women, the work intensifies at the end of October. This is the harvesting period for the late varieties and the entire family takes part, without for all that being forced from the start to follow draconian work schedules. Work is done above all in the cool morning hours and in the late afternoon. However, as time goes on, the pace accelerates: the rice stalks are recumbent and it would be hazardous to allow the grains that are too ripe to fall themselves. Among the Tampuan, a mutual aid system can be organized should the need arise, when a family is late (illness, death, other unavailability) or when unforeseen rains could cause the rice to rot.

The harvested paddy, once it has been sorted and dried one or two days in the sun, is then kept in a sheltered place. There are a number of ways of storing the harvested rice. The only permanent feature is to avoid mixing the different varieties. Most often the grain lofts are on round stilts in order to repel rats; some are situated inside above the main room of the house in the cleared field, others are special constructions isolated from human habitation. When the work has been completed, a ceremony concludes the last day of field work: a chicken is sacrificed, a jar of rice beer is opened and offerings are made to the soul of the rice so that the harvest does not come to harm in the various silos where it is kept. The agricultural cycle is completed after this celebration: the women will return from time to time to the cleared land to gather cotton (in January) and a few other plants, while the men will go back and forth once a week to transport the weekly ration of rice from the *miir* to the village. The harvest is thus left without surveillance in the field, for the theft of rice is normally deemed inconceivable. To steal someone else's harvest is held to be one of the most serious offences and can entail ostracism, not to mention the torments that the culprit calls upon himself from the soul of the rice. "He who steals brings harm to himself," according to the Tampuan adage.

Resumption or abandonment of the field

After the harvest, the rice straw and stalks, spread out on the ground and trampled during the harvest, are left on the land, for the same reasons as are the creeping epiphytes (of cucurbitaceae) scattered on the parcel. This waste matter is sometimes used to feed a few head of cattle that come to freely graze, but most of it will decay amid the grass and shoots. These haulms form a thick litter that is in the way of further sowings. A hindrance, but also an advantage, insomuch as their presence involves clearing practices that make it possible to lengthen the period of exploitation of the soil for several consecutive years. Raking, weeding, and the burning of plant residues are undertaken from the second year. The soil, which is scraped lightly at that time, becomes more friable on the surface and the layer of ash is spread, penetrating the soil and providing valuable inputs of chemical components.

Should the peasant decide to remain on the same site, he confines himself to extending his cultivated area by clearing a section of forest located in the prolongation of his field. One or several portions of the initially cleared land – those that provide the lowest yields – can also be abandoned. In fact, one piece of land replaces another, rather than the cultivated area being increased. This pattern will not be systematically repeated every year, but at least every second year for four to five years – depending on the available area –, and at the end of five cycles, the original clearing will have been entirely abandoned for adjacent lands. The bushy shoots around the old tree stumps and the growth of branches on the spared trunks are abundant as of the second year and the weeding out of undesirable plants becomes increasingly difficult. At the end of four or

five years, even weeding does not suffice to prevent grass from rapidly returning amid the crops.

While the first burning improves the soil, from the second year onwards, the initially acquired elements have to a large part disappeared subsequent to leaching and consumption by the cultivated plants. The plant matter consumed by the clearing fires that take place over the next years is inadequate, even if self-propagating grasses have grown densely. In any case, it is not enough to renew the input of natural fertilizer. This exhaustion of mineral matter confirms the necessity to increase the parcel, to displace it portion-wise, even though the red soils in particular are well provided with mineral matter and can allow of an additional period of exploitation compared with that on calcareous, clayish and sandy soils. Animal manure is not deliberately used, although those who have herds of bovines let them graze in the recently harvested fields. The Tampuan recognize no practical usefulness and fertilizing with cow dung is not given any attention, if it is not, quite on the contrary, negligently thrown outside the *miir*.

Three successive years of rice cultivation on the same plot represents a minimum average in Phum Chon, and fives years a maximum – although not widespread. The length of time is also dependent on the declivity of the land, and lands with steep slopes are abandoned more rapidly. The periods of use of one and the same parcel are the same in the surrounding villages. The abandonment of *Oryza* cultivation does not however mean the abandonment of all other crops, in particular with the adoption of plants for commercial purposes, some of which are long-standing, such as sesame and fruit trees (papaya, jack fruit, orange, lemon and guava) and others that are more recent, such as cashew nut and pineapple. A modification of the relation to the earth is thus being witnessed among some peasants, inasmuch as some *miir* are converted into plantations and entail a long-term mode of exploitation.

For the Tampuan, however, the main constraining factor is connected with weeding. Sooner or later, the degree of intrusion of weeds will determine the continuation or abandonment of a field. In fact, beginning in the second year of cultivation, the *miir* is progressively invaded by *Gramineae* and other annual plants, the seeds of which were disseminated during the first year of cultivation. The struggle against weeds, in particular *Imperata cylindrica*, becomes an obsessive matter and requires an increasingly sizeable labor force. This is inconvenient because every exchange of work time between two families is scrupulously counted so as to be returned in the form of identical time or remunerated in kind/cash. To this must be added the scant enthusiasm the Tampuan show for weeding. But, in this instance, it is no longer a matter of doing away with a few clumps scattered here and there, but of being faced with the development of a veritable herbaceous cover. During the third year, the problem proves to be even more insurmountable in some places, which are then abandoned. Everything takes place as if the abandonment of a parcel is done independently of a possible decline in soil fertility and would be primarily motivated by the intensified presence of weeds, together with the impossibility of effectively struggling against this profusion. This is so, despite the fact that, according to what the Tampuan say, this intrusion is apparently less extensive on red soils than on others on the plateau.

Conclusion

The Tampuan village territory appears as fragmented plots within which large sections of forest are left intact. The fields are broken by copses of variable size, made more complicated by pieces of remnant forest, the vegetation of which is sometimes luxuriant and impenetrable. Patches of woods are also found in some fields. These irregular clearings give a disordered and confused impression, but, as Jean Boulbet noted, they witness to a guarantee of lasting balance.[84] A family parcel, the area of which is never vast, completely enclosed in the forest, superficially weeded out along its perimeters and gradually abandoned, would represent a better solution, as far as the ecological viability of the agricultural system is concerned, than the vast collective land clearings that are clean and clear and give a better impression, but where forest re-growth is more contingent. As long as forest rotation does not take place too quickly, there is little erosion because of the dispersion of cleared areas. The very small cleared lands, which appear to be more precarious than the vast cultivated areas of a single tenant and laid out for many consecutive years, ensure a better chance of new forest growth and thus contribute to a better ecological stability of the natural ecosystem. The ceremonial rituals, the detailed description of which would have exceeded the scope of this paper, are present in nearly all the activities in the agricultural cycle. In view of this, it cannot be denied that the Tampuan spend their lives performing sacrifices. But far from representing the fears of a human society that does not understand its world in a so-called rational manner, the sacrifices on the contrary lend that world meaning. The rituals signify to man that the place he occupies in his natural environment is not that of a mere predator or someone whose mission is to master and vanquish at any cost the savage state. His behavior with regard to nature and the beings that dwell in it (animals, spirits) is concretized through an exchange relation, a compromise, before resulting in a just equilibrium.

This does not mean to say that the relatively sustainable agricultural system of the Tampuan can be easily repeated, that their land-clearing technique is immune to demographic pressures, that the introduction of new cash crops will not have an impact, nor that the situation in Phum Chon was the same thirty years ago and that it must remain the same in the future (supposing that one would allow them to do so), or even that the re-growth cycle will and could be preserved. It is however apposite to recall that, like other Proto-Indo-Chinese groups in Ratanakiri, they derive their agricultural insight from a tradition that rests on centuries of interaction, familiarization and empirical

knowledge that is far from devoid of any foundation. Tradition, of course; but that does not mean that it is static and closed to any exogenous contribution. Changes can already be seen to appear in the scheduling of crops, in the preponderance of certain crops over others, in particular with the introduction of a market economy that is replacing the barter relations between tribes and that favors a few marketable commodities (fruits, grains, tobacco) in demand in the provincial capital of Ban Lung.

One cannot fail to recognize that the accessibility of land and forest required by extensive land clearing will not always be possible at the pace at which the annexations of forest territories by foreigners is increasing. The ecological milieu comprised by the low plateau cannot support at the same time a demographic surfeit and the intrusion of new cash crops without excessively deteriorating. The fragility of the land-clearing system stems precisely from the same conditions as its reproducibility. Viable or not, it appears that it is doomed to undergo profound reorganization and changes, not to say mutations. The example of the Kachac and of a few Jorai and Tampuan villages located in the riparian biotope of the Sesan shows that the indigenous populations are able to adapt to new ecological circumstances (agricultural implements, herds and cowsheds, dung, marketing networks that they control, etc.) On the other hand, the establishment of small Khmer producers who are supposed to play a model role is hardly convincing, all the less so as these migrants risk paying the price themselves by acting as precursors in the establishment of large wage-paying operations (hevea, coffee, palm oil).

Alternative solutions and new agricultural practices intended to diminish the areas of land that are cleared, as foreseen by the present government and development organizations, can of course be proposed. We will not develop this point, which would call for lengthy comments and has already been described in numerous works pertaining to other regions.[85] We have shown in the course of this article the close link between the agricultural and ecological milieus, and it goes without saying that the changes brought to the agricultural practices will inevitably have consequences for the social and cultural practices of the Proto-Indo-Chinese. Other solutions, which are socially, culturally and economically less costly, can also be envisioned so as to improve land-clearing techniques and to offset their major constraints, that is, the expansion of lands under cultivation and forest re-growth. It is in fact possible to reduce the periods of new forest growth by choosing for each ecological niche the most appropriate and rapidly growing bush, climbing or epiphytic species, while not exhausting the richness of the soil. The refinement of the choice of parcels, manuring with natural manure and favoring – although not excessively – animal husbandry, a better selection and availability of rice varieties (although the Proto-Indo-Chinese have shown a great ability in this area) would be some of the measures that could be attempted. Numerous other possibilities intended to implement more stable production systems (associating annual crops, horticulture and arboriculture, for example) could emerge, however under the condition

that these alternatives would not result fom a decision imposed by instances that unfortunately are little concerned about respecting and understanding the way of life and the aspirations of the indigenous people. It would thus be desirable if a large number of species and arboricultural varieties and replacement crops adapted to the local edaphic conditions would be at the disposal of the populations so that the latter might choose and integrate them as they think best in their production systems.

It must be recognized that even the participation of the populations in environmental policies, much extolled in incantatory discourses and emphasized in many development projects, is often only a veiled pretence proposed as an alternative to radical change, but frequently leads to the same result: similar aims, but with apparently different methods, means and rhetoric. It is not the idea of participation that is bad, but there is a misunderstanding from the outset, if only because of insufficiently established and integrated conditions for implementation and because of the exceptionally combined means brought into play. This is a less costly strategy because, under the pretext of mobilizing and motivating the people, one is chary of paying them, as "it is for them". Less expensive, but in practice also enfeebling: faced with the direct imposition of external ideas, one prefers a prior conditioning (through education, instilling awareness and responsibility, etc. – as if the populations in Ratanakiri did not have a form of education or were not endowed with awareness or did not have leaders). Genuine participation means, on the contrary, a *negotiation* between partners and not unilateral discourse – as complacent as that may be – between teachers and pupils, whose acts, behaviors and ideas are castigated as soon as they depart from the logic of the actors of change. Too few of the projects conceived in the corridors of distant cities are willing to change their view of things after having realized the ineptitude of what is too readily called their development activity. Those responsible for the projects are also subject to logics and constraints of a different order (vis-à-vis sponsors, etc.), which are sometimes difficult to reconcile with what the populations really expect.

In an article felicitously entitled, '*Cultural exception and agricultural exception,*'[86] Jean Semal calls to mind that cultural specificity must be coupled with an agricultural specificity that would acknowledge the agriculturalists and rural functions in the diversity of their techniques, their markets and their know-how. The problem is couched in precisely these terms for the original inhabitants of Ratanakiri, who are in the process of becoming unwanted societies on their own territories, the lands of which are subjected to manifold forms of cupidity. Rather than being offered a future that attempts to safeguard and valorize what comprises the substance of their life, the land clearers are condemned to being assimilated into the mass of Cambodian peasants – which is not necessarily a dazzling evolution in itself – and to receiving only derisory substitutes offered in exchange for what can be extracted from them.

Appendix

The uses of bamboo among the land clearers of Ratanakri

(an inventory – not exhaustive - of 106 main uses current among the Tampuan, Jorai, Brao and Kachac)

1. Food (2)
young bamboo shoots
fresh bamboo water

2. Preparation of food, cooking utensils (14)
cooking of rice, soup (fresh bamboo)
container for water
fuel for lighting fires (gives more heat)
winnowing tray
bellows for kindling fire
measure for rice beer
ladle/measuring cup
tube for preserving food (plugged with rice straw at the end)
basket for steaming rice
small pestle
transport of cooked rice
straw for rice beer
drinking glass
pincers

3. House (18)
bamboo roofing tied with rattan
house walls made of crushed and smoothed bamboo
door
window
uprights of ladder
half-rounded tiles
foundation of partition (bamboos with holes drilled at regular intervals)
floor (long flat bamboos)
joists (large bamboos)
draw-sheet
upper part of hearth (rectangular) for hanging objects, drying meat
water canalisation, ridge tiling (half bamboo, inverted)
needle for fastening the leaves of the roof
pointed stakes for fencing
straw-filled mattress
resting place (raised, fixed bed)
suspension rod (maize, clothes)
bench, promontoire

4. Agricultural activities (16)
flail for threshing rice
stake
fence for protecting trees
string made of bamboo integument
canalization of rice field
drain for taking water from one parcel to another
arbour
tubes for rice seeds
round woven container for seeds
bran cover
fencing for fields (rice field)
receptacle for hevea sap
yoke for two buffaloes
pitchfork
rake
rattles (against animals)

5. Laying out of water courses (7)
hanging bridge
pole for canoe
oar (half bamboo)
dock
raft for going down rivers
damming of water courses
handrail (for bridge)

6. Fishing (5)
wick for explosives
fishing-rod
hoop net, narrow and long, for eels
ovoid hoop net
trap for freshwater turtles

7. Household items (13)
ring for tobacco
baskets with handles, to stock rice (round, large or square)
pole with hook (for picking fruit)
round suspended basket (to put away various objects)
rounded basket with handle
grater
scraper
broom handle, fibres
torch
frame/case for battery lamp
support for whetstone
rectangular drying rack for indoors
pole with two notches (for carrying two loads)

8. Weapons, hunting (10)
knife
knife handle
case for arrows
arrows
mini crossbow (toy for learning)
knife case, machete
object for squirting spicy water
blowpipe (rare)
trap for squirrels
traps driven into the ground (pointed bamboos)

9. Animal husbandry (6)
trough
incubator
wire (sharpened bamboo)
support for poultry
cage
basket for fowl, game

10. Ritual implements (3)
"*chro*", sacrificial object (shape of buffalo tail)
"*sroh*" in the rice fields, *chamcar*
receptacle for offerings (protection of houses)

11. Musical instruments (3)
flute with six pipes
"*seng*" or "*kunteung*": seven-stringed instrument with gourd, bamboo neck
"*mem*": single-stringed instrument

12. Others (9)
plaster
crutches
stretcher
stilts (children's toy)
nozzle of pipe
fire-lighter (with three pieces) by friction
markers, indicators in the forest (7 to 10 signs)
walking stick
pharmacopoeia (several applications)

NB: For the house: so as to protect the bamboo from termites, it is soaked in water for 7 to 15 days. It gives off a bad odour to which termites and other vermin are sensitive. This has a lasting effect that is reinforced during the rainy season (information gathered among the Kraveth, Phum Lamoy).

Notes

1 F. Ponchaud, *Kampuchea: une économie révolutionnaire*, Paris, 1979.

2 The World Bank, Agenda for Rehabilitation and Construction, Washington, June 1992.

3 The tropical monsoon climate in Cambodia, on the other hand, is characterized by relatively uniform temperatures, with an average of 25º C. For the geographic and climatic setting, see Jean Delvert, *Le paysan cambodgien*, Paris, 1961.

4 Report by the NGO Global Witness, roneograph, Phnom Penh, March 1995.

5 Wood is the principal material of the habitat, which in the midst of reconstruction.

6 Of the eleven that are foreseen in the four countries concerned (Thailand, Laos, Vietnam and Cambodia) three will be on Khmer territory: one at Stung Treng (908 MW), one at Kratie (the "s*ambor;* " 3,300 MW), and one towards Tonle Sap (140 MW). The Mekong Committee, which is the organization charged with making the plans for these projects, is financed in part by the United Nations (UNDP) and the Asian Development Bank.

7 Office for the Special Relief Operation. Report No. 01/91/E. Cambodia: Assessment of the Agricultural Situation. July 1991.

8 J. Fontanel,, *Ratanakiri: étude du milieu naturel*, Grenoble, 1967, p. 83 sq.

9 P. Descola, *La nature domestiquée. Symbolisme et praxis de l'écologie des Achuar*, Paris, 1986, pp. 52-71.

10 For a historical survey on the subject, see F. Bourdier, *Les populations de Ratanakiri*, Phnom Penh, 1995.

11 Refugees in camps in Thailand, o whom some were gone for twenty years, continue in 1994-1995 to come to settle.

12 G. Diffloth, The Indigenous Minorities of Cambodia and the Elections, UNTAC report, 1993.

13 P. Cupet, *Voyage au Laos et chez les sauvages du Sud-est de l'Indochine*, Paris, 1900.

14 That established by J. Devert in 1960, although concerning all of Cambodia, has scarcely been used because the only groups mentioned, usually imprecisely, are the Laotians, Tampuan, Jorai, Kraveth and, strangely, the Burmese (who were only a handful at the time).

15 Some authors connect them to a subgroup of Sedang living on the high plateaux of Vietnam. The Halang lived on the banks of Sesan during the eighteen century, when they were pushed more to the north by Jorai guerrillas during the following century. See B. Bourotte. *Essai d'histoire des populations montagnardes. Paris*, 1955

16 Name designating the far north-east of the province because of its evocative shape.

17 J. Martas. *Un village en forêt. L'essartage chez les Brous du Cambodge*. Paris, 1983

18 B. Bourotte, *Essai d'ethnohistoire des populations montagnardes*, Paris, 1955, pp. 1-116.

19 In 1966, they were more than 150,000, divided into two subgroups: the Hodrung and the Jorai, properly speaking.

20 Group and forced marriages under Pol Pot perhaps contributed to this phenomenon.

21 In the 1950s, P. Bitard noted that the Laotians had a tendency to settle near aboriginal populations, indeed, even in Brao and Kreung villages. Similarly, it was not infrequent to find, in 1995, Lao "*kru*" (healers) practising their art in the pagodas of the province and settling in Jorai and Tampuan villages.

22 F. Bourdier. *Représentation et socialisation de la nature*. Bordeaux, 1995.

23 Cl. Levi-Strauss. *Anthropologie structurale*, Paris, 1963.

24 The World Bank envisions participating in the construction of a network of roads in the province, without thinking of the disastrous consequences of the intensified appropriation of lands of Proto-Indo-Chinese populations.

25 To facilitate schooling, accessibility to health care structures and to the district markets.

26 The term "minority" refers to a situation of vulnerability of populations in relation to other Cambodians.

27 J. Boulbet, *Paysans de la foret*, Paris, 1975, p. 7.

28 P. Kunstader et al., *Farmers in the forest*, Hawaii, 1978; A. Walker, *The Highlander Heritage*, Singapore, 1991.

29 Y. Lee, *Man the Hunter*, Chicago, 1968; R. Rapport, *Pigs for the Ancestors*, London, 1969

30 J. Matras-Troubetzkoy, *Un village en forêt*, Paris, 1983, p. 368.

31 We will not consider here complex changes in regard to formal family organization, which is beyond the scope of our study.

32 M. Salhins, *Au coeur de sociétes*, Paris, 1976, p. 58.

33 The Laotians claim, however, to have influenced the Kachac before the Pol Pot period.

34 Cattle are traditionally left to wander at will in the adjacent forest and in some pasturing areas.

35 Buffalos are sacrificed on other occasions: illness, annual village festival, etc. These ceremonies do not replace, however, those that are connected with agricultural practices intended for particular spirits.

36 J. Matras-Troubetzkoy, 1983, op. cit., p. 385.

37 J. Matras-Troubetzkoy, 1983, op. cit., p. 387.

38 According to some information gathered, the villagers would have received firearms from the Heng Samrin government in order to protect themselves from the eventual penetration and return of the Khmer Rouge.

39 *Angkar* means "organization". The revolutionary party of the Khmer Rouge.

40 Cl. Levi-Strauss. *La science du concret in la pensée sauvage*, Paris, 1962, pp. 3-47.

41 Everything was attempted under Pol Pot to destroy ethnic specificities, whether by collective marriages between diverse villages without abiding by exogamous rules (up to 50 couples at a time), the regrouping of villages, breaking up of families by the division of work and the creation of separate houses for parents and children, the prohibition against drinking rice beer, and the prohibition against sacrifices and festivities in general.

42 The terms "high" and "low" have nothing to do with the height above sea level of their settlement areas but rather with the latitude, with high corresponding to north, and low corresponding to south.

43 This certificate, with the effigy of the Cambodian state at its centre and that represented in its written elements (the school as pivot of assimilation, the woman who works in the irrigated field and the man in the process of tapping a hevea) the entire national ideology faced with the non-Khmer populations, shows how an insidious shift is taking place and drastically changing the identity of local groups. See H. Jonsson, *Report to Health Unlimited on Health Issues among Upland Groups in Ratanakiri Province*, p. 2 sq.

44 The land belongs to spirits of the forest, and not to men.

45 We will see below that a sudden abandonment of cleared lands can be connected with similar reasons.

46 This is not the case for all land clearers. J. Boulbet has noted in southern Vietnam the exis-

tence of nomadic tribes, the Cils (a Mnong subgroup?), who each year clear a section of the primary forest to cultivate their gardens on the zones of the high plateaux normally exempt from any human activity by other Proto-Indo-Chinese (in *Les Paysans de la forêt*. 1975, op. cit).

47 Phum Chon, where we conducted our study, has been settled since 1979 and the inhabitants have no intention of moving their houses. Before the 1970s, the village was located only a few dozen metres from the present village, and had been there more then twenty years.

48 North, south, east, west, north-east, north-west, south-east and south-west.

49 A common house does not mean promiscuity, inasmuch as each couple and almost every unmarried child has its privacy. Partitions separate small, narrow rooms closed with a narrow door opening onto a transversal corridor where the various household kitchens are located. In the centre of the house is a "function room" where visitors are received, where beer in earthenware jars is drunk or where guests can sleep.

50 The marriage ceremony involving considerable expenditures can be postponed for economic reasons.

51 Practice of the levirate of the youngest.

52 However, most of the private goods (spinning wheel, clothes, pots, dishes, domestic tools, etc.) are placed on the grave of the deceased person.

53 The youngest girl is the incarnation of the highest ritual position attained by the family unit thanks to the numerous festivities that take place, in particular in the dry season.

54 G. Condominas, *Les Mong Gar et leur environnement*, Paris. 1983, pp. 11-76; H. C. Conklin, *The Study of Shifting Cultivation*, Washington, 1961; J. Boulbet, *Le miir, culture itinérante avec jachère forestière en pays maa'*, Paris, 1966 ; P.B. Lafont, *L'agriculture itinérante sur brûlis chez les Proto-Indochinois des hauts plateaux du centre Vietnam*, Bordeaux, 1967 ; E. Leach, *Some advantages of shifting cultivation*, 1957.

55 G. Diffloth, 1989, *op. cit*. and Bourdier, *Les populations de Ratanakiri*, 1995.

56 The existence among the Brao and the Kreung of small private houses where the young girls go to sleep alone during adolescence, like the common houses or even the individual huts for young boys among the Tampuan, feed discussions among the Khmers, who conclude the existence moral licentiousness. This has no basis in reality: these small houses are near those of their parents, who carefully control the behaviour of their children and allow no intrusions until the partner is officially accepted and recognized as the fiancé and thus the future husband of the young girl.

57 P.M. Hughes, *Report on the Highlanders of Ratanakiri for the year of the Indigenous People*, Phnom Penh., 1993, p. 4.

58 Cited by J. McKinnon, *Structural Assimilation and the Consensus, Creating Grounds on which to Re-arrange our Thoughts*, p. 311 sq.

59 This period of abandoned land should not be confused, as is done by J. Boulbet, with the practice of fallowing land. H. Crochet (*Agriculture sur brûlis, élevage extensif et dégradation de l'environnement en Amérique Latine*, 1993, p. 281) rightly mentions that in the old European agriculture, "the practice of fallowing land designates all the work on the land separating two cycles of crops and, also, the lands subject to this work. The practice of fallowing land thus occupies the "top" of rotation (…). By extension, one often speaks of the practice of fallowing land to designate the period without crops (and the lands thus "left undeveloped") that separates two cycles of successive crops, provided that the lands would be subject to one phase (at least) of work on the land". This term should be excluded from the terminology pertaining to land clearing.

60 Mekong Secretariat in Cooperation with FAO. Thailand. 1994. op. cit. p. 94.

61 Two national parks are foreseen: one north of the Sesan River, and one straddling the southwest of Ratanakiri and the province of Mondolkiri.

62 K. Chupinit. *Hill Tribe Relocation Policy: Is there a Way out of the Labyrinth? A case study of Kampaeng Phet in Chiang Mai*, 1987, p. 28.

63 P. Blaikie and H. Bookfield. *Land Degradation and Society: Defining and Debating the Problem*, London, 1987, p. 1.

64 John Mckinnon, *op.cit.,* p.323

65 The question of Cambodian nationality is a problem to the extent that the constitution stipulates that nationality is accorded to Khmers speaking and writing Cambodian. In this sense, only a minute minority of the ethnic populations can claim to be Cambodian citizens.

66 Another possibility is terraced cultivation, for which the implementation procedures are even more complex. This is, however, a characteristic of civilization that is found among the Hanunoo in the Philippines (See H.C. Conklin, op. cit.), but which is totally unknown among Proto-Indo-Chinese.

67 J. Delvert, op. cit., pp. 55-60. However, irrigation works, which already existed in the 1950s contrary to Delvert's assertions (in Kratie), considerably extend the work time, and even more so if the peasant makes two harvests a year.

68 G. Martel. *Lovéa, village des environs d'Angkor*, Paris, 1975. The author mentions an extensive crop of 370 hectares, which is not always cultivated every year, while the rest of the territory comprising 4,000 hectares is composed of woods and marshlands. The rice fields are bedded out but badly prepared and an insufficient planning leaves part of the rice field dry, involving the use of a dibble to bed out the seed holes. The bedding out is often done among grass, without weeding or fertilizing.

69 H. Jonsson, *op. cit.,* p. 9. We have not been able to personally verify this assertion.

70 F. Bourdier, *Perception et gestion de l'environnement chez les Irular des ghats occidentaux*, Bordeaux, 1994.

71 We have already addressed this dimension in a preceding section.

72 Only one couple in the village avails of two cleared fields that are not contiguous; the wife attends to one and the husband to the other.

73 Among the Mnong, the land lord establishes a schema of the land register of future fields and distributes the parcels among the families. Subsequent to agreement of those involved, one identifies one's plot, demarcates it with shrubs for reference and fells a tree to symbolize taking possession.

74 M. Dufumier, op. cit., p. 249.

75 The tunnels loosen the soil and, if the termite mound is built with hard walls, it somewhat interrupts the leaching of the soil when it rains by slowing down the carrying away of silica, while favouring the concretion of salts and invaluable carbonates. The second advantage is the upwelling of fine, generally fertile materials (alluvium, etc.). The surface is thus enriched in terms of subterranean intakes (calcium, magnesium, potassium).

76 J. Boulbet, op. cit., pp. 20-21.

77 The meaning of the term variety should be understood as it is used here by the land clearers. Lacking verification, it cannot be said that the vernacular classification corresponds to a botanical classification.

78 The existence of numerous species or varieties that are held to be less interesting, but that can have genes that are resistant to maladies, tolerant of insects and lend hardiness, must be considered as an asset and not as an obstacle to increased production.

79 In March 1995, some families had only this variety in storage to bridge the gap.

80 Because of its genetic composition, rice lends itself to the selection of varieties, all the plants of which ripen at the same time. These virtues, which according to J. Pernes (La génétique de la domestication des céréales, la recherche, Paris, July-August 1983, pp. 6910-6919), facilitate the harvest, were sought after and extolled by rice growers, but not by the land clearers of Ratanakiri.

81 P. Gourou, *Riz et civilisation*, Paris, 1984.

82 Attempts at harrowing, which were not very convincing, were carried out in the shallows and small natural valleys in eastern Borkeo and in O'Yadao. While the multiplication of ploughing stimulates the mineralization of humus, it is still necessary that the minerals thus released would not be carried away by leaching.

83 Every gleaning makes it possible, generally, to ensure a meal for the family.

84 J. Boulet, op. cit., p. 43.

85 See the bibliographic references on Vietnam and Thailand.

86 J. Semal, "Exception culturelle et exception culturale", Cahiers Agricultures, Paris, 1995, 4, p. 82.

CHAPTER 2

"The Mountain of Precious Stones"

The Cosmos, the Forest and Slash-and Burn-Cultivation in Ratanakiri, Cambodia

FOR CAMBODIANS IN THE LOWLAND PLAINS, Ratanakiri (the mountain of precious stones) evokes a certain fascination mixed with an irrational apprehension. It is the country of inhospitable forest, of illnesses, of wild animals, of the Khmer Loeu and the spirits they worship. More recently the name of this northern province was ominously associated with the American bombardments of the 1970s and with the emergence of the Khmer Rouge.

Memories are now fading and the province, populated by 70,000 people, is in the process of becoming a pioneer frontier. The basaltic soil of the central plateau, among the richest in the country, is the object of frenzied speculation. The forest, with its numerous rare species, gold and other precious metals, contains many exploitable resources. Attracted by this Asian El Dorado, where the imagination is sometimes one step ahead of reality, Khmers and Sino-Khmers come to settle in ever greater numbers, supported by the embryonic government that intends to develop the region by all means possible: encouragement of foreign investment, creation of plantations, diversification of agriculture, encouragement of migration (it is hoped that 20,000 Khmer rural people will populate the banks of the rivers).

Ratanakiri is falsely reputed to be a closed region, deserted and cut off from the world. In reality, historical and archaeological data attest to the presence of humans for thousands of years. These people – the roots of the Proto-Indo-Chinese race – survived by hunting, gathering, fishing and shifting cultivation. Ethnic minorities take their subsistence from this system of agriculture, which is found elsewhere in most of the forest. "Eaters of the forest" [Condominas 1957] cause problems for the government because this use of space is unjustly believed to be connected with a semi-nomadic way of life, a symbol of anarchy, precarious existence and of ecological disaster. The objective of the provincial authorities, without drawing hasty conclusions, is to turn the native populations into sedentary populations, to modify and move their settlements near the river, to educate them and inculcate the notion of market economy, initiate them into irrigated rice cultivation and extensive animal production, in other words, to "Khmerize" them.

The study that we propose in the following pages is the outcome of a mission undertaken from September1994 to July 1995, in the framework of the Aupelf/Uref. Starting from the way in which natural phenomena (time, space and causality) are understood and interpreted by the population, we will present the various manners of traditional management of shifting agriculture and the way the latter is linked to the socio-cultural logic that underlies it. Without entering into the ideological polemic animating the

debate on shifting agriculture, decried by some and idealized by others, our intention will be in the final analysis to explain the uniqueness of this system and to envisage its viability and its impact on the environment, taking into account new demographic pressures and current socio-economic changes.

Characteristics and indigenous conceptions of the natural environment

Covering an area of 12,561 km^2, Ratanakiri Province is situated in the extreme north-east of the country, more than 600km from Phnom Penh. It is bordered to the north by Laos, to the east by Vietnam, to the west by Stung Treng Province and to the south by Mondolkiri Province. This type of geopolitical entity has no equivalent in the vernacular languages, in which no word exists to describe the region or even to circumscribe the area inhabited by a particular ethnic group. For all of these groups, the area is broken up into village territories within which areas of cultivation are regularly shifted. Beyond this social space is ''elsewhere''- the domain of the stranger, which is penetrated from time to time on the occasion of big hunts or to visit distant relatives. This village area is a relatively well-demarcated zone where supernatural beings are known to live. The area is sufficiently large for village members to draw the resources necessary for their daily subsistence.

Geographic description: The types of vegetative cover and their respective areas have been estimated by satellite imagery (Landsat MSS and Landsat TM) during the dry season. However, one should note, among other things, because of scale (1: 25,000) or the lack of verification on the ground, the omission of the mangroves along the Sesan, the under-estimation of the area of swiddens, and the conglomeration of cleared zones (sometimes confused with natural savannahs), that hardly correspond to the reality.

Table 1: Vegetative and cultivated area of Ratanakiri

Designation	Area km^2	Designation	Area km^2
Town/urban zone	1	Mixed forest	576
Irrigated rice	117	Secondary forest	724
Cultivation on the plateau	2	Open forest	470
Shifting cultivation	231	Natural bushy savannah	126
Plantation	41	Abandoned savannah	126
Cultivation on the plains	2	Grass savannah	29
Dense forest	6,014	Water	51
Deciduous	3,998	Mangrove	0

Source: Landsat MSS and Landsat TM, 1993

More to the north towards Laos, is the mountainous domain, presently unoccupied and still unexplored, of the dense seemingly endless forest, as the local people usually describe it.[1] In the same way, the zones of deciduous forest are only partially inhabited,

apart from the river banks, which are populated here and there by Laotians and Khmers.

The central plateau seems to be the most favored place to live among the shifting cultivators. These people employ materials from plants for nearly everything for their housing, clothes, tools and food. This choice, as Pierre Gourou noted, "is a trait of civilization and not the result of natural circumstances". It has important implications for the management of the environment.

The forest covering the territory in an apparently uniform manner conceals a variety of topography and soils - vocalic remnants, craters, inselbergs, pedoplains, valleys, thalwegs, plateaus, small valleys and mountains. The red basalt soils extend over an area of 20,000 km^2. They are deep (a dozen or more meters in thickness, sometimes more) and are apparently rich in magnesium and calcium, compared with the grey clay of the plains. The local populations designate each type of soil found in their respective ecosystems with great precision.

The shifting cultivators know better than anyone the morphological and pedological diversity in their area. This knowledge, based on centuries of agricultural observation and experimentation, allows them to precisely distinguish the organic and inorganic components of their surroundings. The Tampuan distinguish areas where many trees are still growing from sandy areas with many or few large rocks (*mahaoteu, mahou*), wooded hills (*pri phnom*) at the base of mountains (*phnom kate*) from those higher up (*phnom choeungoi*), fields and prairies (*srey, unglao*) from the swampy terrain (*trop*), small deep valleys and sloping land (*te charand*) from flat and open terrain (*te tamplang*). The characteristics attributed to the soils are generally associated with these forms of relief. The main criteria for classification refer to color, vegetation, texture, permeability, locality and fertility.

Table 2: Vernacular classification of main identified soils

Te trop	land where water stays
Te roy	red soil
Te bak	gravelly soil
Te ksad	sandy soil
Te mo	black soil
Yet- soil	soil where only weeds grow
Te lapan	"edible" fertile soil
Te rong	thick soil
Te paba	soil of intermediate quality

Indigenous nomenclatures for vegetative cover are detailed and distinctive. They show a larger diversity than the abstract scientific generalities inherent in the classification of tropical vegetation, which are often reduced to categories. Resolutely pragmatic, the

nomenclatures are based on what is visible, the general form, the state of maturity and the potential usage. Certain trees (thorny, large *dipterocarpus*) or certain vegetative associations (bamboos, strawy grasses and some thick bushes) have the role of ecological indicators. More than a dozen terms are used uniquely for indicating the different types of forest formations present on the plateau.

However, more precise variations, which change according to geographic zone, are found in the traditional delineation of time and the seasons as elaborated by the different ethnic groups. These groups have constructed a model representing the annual cycle, beginning with the month of December when the harvests have been completed, which distinguishes a cool season from December to February. The rainy season is divided into periods of small, medium, and large rains. The dry season is equally divided into temperate, warm and very warm months. According to their local area, the villagers have been able to identify a series of micro-seasons, the existence of which would be difficult to detect in meteorological tables. The general mechanism of the monsoon and its inflections is equally well known to the ethnic groups who have established a lunar calendar as an agro-climatic reference. This calendar contrasts not only the dry moons to the wet ones, but makes finer distinctions as well; moons of the monsoon, cool winds, new leaves, cicada, hot storms, and fires for clearing for in the dry months; moons of the persistent rains, of corn, of abundant rains and of late rice in the rainy season. To this is added a complex astronomical system in which the appearance of certain constellations, notably Pleiades, Orion, Andromeda and the Great Bear, is in direct correlation with the announcement of imminent climatic events. Reference to the position, visibility and clarity of the stars has consequences for decisions concerning the unfolding of the agricultural cycle. In the same way, following the example of the classification of the Achuar in the Amazon, a clear distinction is made between rain water (*tieurk bay*) and water from the earth (*tieurk en gar te*). For the Tampuan, the first comes from the second not on the basis of the natural principle of evaporation, but as a result of direct human intervention. The arrival of the rains depends on certain behavior with respect to water points, but it is attributed more to the process of cosmic fermentation, for which the making of rice wine represents a metaphoric model. Humans therefore have partial responsibility for the annual renewal of the rains in that the drunkenness characterizing the large festivals in the middle of the dry season is supposed to bring the monsoon rains.

From this description of nature sketched in a very schematic way, there unfolds a unique relation to space and time. In the first place, the choice of land to be occupied for family fields and the village site (displacements occurring when epidemics suddenly appear or the surrounding lands are depleted) is not dictated by simple human will alone: it is necessary to show allegiance to the spirits inhabiting the forest, the water points, the rocks, hills, paths and village sites. As long as the agreement of the supernatural powers is not certain (through dreams, sacrifices and prayers), no human action can be undertaken. The relief of the terrain and the specific landforms bear names that serve not only as landmarks in the geography of the place but also indicate the locality of a spirit invoked in prayer, with which a ritual relation is established at the time of illness and at every intended agricultural activity (hunting, fishing, gathering, cutting tress). Some sacred places are exempt from all human activity - parcels of forest near the village, on the top of hills or along the banks of streams. Among the Brao of Ta Veng, the spirit dwelling on top of Phnom Troll demands that humans defend its habitat in exchange for its protection of the harvest, under the threat of sending lightning in case of negligence. The village guardians of the place do not want any person to dig the soil in search of semi-precious stones or to cut large standing trees on the hillock. Such traditional systems of protection are found sporadically, but are far from allowing of conclusions in terms of ecological behavior, the concept of which is purely Western. There is, in effect, a tendency among the tribal populations to believe in the existence of unlimited resources. This attitude is of little consequence in sparsely populated regions such as Ratanakiri, but can become harmful in zones with greater human concentrations.

In the second place, the principal points of reference of spatio-temporal orientation are neither the cardinal points nor the territorial organization imposed by the Khmers, but rather the sites of the old village, the abandoned swiddens, the hunting trails, the paths maintained to link the village to cultivated lands, a rock, a thicket where a spirit is known to live, etc. Time and space thus appear to be indistinguishable and the division of the day is minutely transcribed in the vernacular language, the terms of which make reference to human activity that is carried out preferably at a precise moment and at predetermined place. However, as soon as one is far from familiar space, taking one's bearings becomes unclear. Everything that is outside the universe of daily custom, the distance/limit of which varies from five to ten kilometers depending on the size of the village, is vaguely described as being ''far'', ''over here'', ''over there'', without greater precision. In the absence of a nearby river that plays a major axial role (Kachah, Brao), most of the indigenous groups refer to the passage of the sun during the day, and to the moon and other celestial bodies at night. The Brao, like the Tampuan, evaluate the degree of maturity of herbaceous vegetation, the sound of birds, the course and the level of streams, the emanation of certain odors of plants, and learn these manifestations as well as many other distinguishing indicators of space and time.

Unity and diversity in the practice of shifting cultivation

A large part of the local knowledge pertaining to the environment has its application in the forms of distribution and management of cultivated space. As essential part of the

economy of forest agriculture is that the occupation of the swidden fields constitutes the major way for giving value to village territory.

A salient trait is the diversity of ways in which slash-and-burn agriculture functions. In geographically similar territories, the populations resort to many different agro-forestry strategies. Accounts of this are not isolated, stretching from the north of Thailand to Vietnam and Laos, and studies have been made by numerous authors. This signifies that the ways in which indigenous people occupy space cannot be explained exclusively in terms of adaptation to a constraining environment. The surroundings suggest, but do not impose, different ways of organizing social territory and cannot be reduced to a simple explanation based specifically on restrictive ecological factors, as some authors would suggest.

Swiddening is above all a long-term technique that stems from knowledge of the stages of forest regeneration. Its aim is to domesticate without conquering or dominating nature. Each operation in the agricultural cycle, from clearing to burning the brushwood, to weeding and harvesting, is accompanied by propitiatory ceremonies. The forest is the elected domain of the spirits and the inclusion of ritual in technical and practical cultivation and in the organization of space is an integral part of the life of the swiddener. Rice is given a soul and the principal variety (vang), which according to Tampuan myths was given to humans by the gods, is venerated. This contributes largely to the position of humans in their surroundings and codifying the system guarantees the perpetuation of swidden agriculture, and therefore the preservation of the forest surroundings.

Within the swidden communities, life is organized around the scale of the village, clan, lineage and the larger or nuclear family. These tendencies permit of an individualism that is inscribed within a certain space and have profound implications for the agricultural techniques employed. Thus, family plots can be contiguous, forming a field divided by several similar families (Jorai), or a large village field of a single holding (Kraveth, Phnom, Brao). Conversely, personal fields can be separated from one or another in the same village area, as among the Tampuan and the Kachah. Among these two groups, the *miir* of the same residential lineage are in proximity to one another, but separated by portions of forest. The strictly family plot corresponds to erosion that is more moderate than to that which affects the single field of a village where run-off is more substantial. The period of occupation of a cultivated field depends, apart from soil properties, on the form of socio-spatial occupation. On the red basalt soils, the fields are occupied from three to five years, with the progressive abandonment of the older part after the second year. The group fields in a single clearing are never used for more than three years, and less if the surface is inclined.

The biannual variation of the place of abode is also to be seen in the relation that humans have with their environment. As long as people stay in the village during the

months of feasting and festivals (marriages and funerals, collective ceremonies), the prohibitions are lifted and there is time to go into the forest in order to take whatever is needed. Once the work in the fields is resumed, the activities of predation are explicitly more codified and numerous taboos suddenly appear, with variations according to social category: clan, position in the kinship, etc. It is the period when people should be concentrating on their swiddens.

Despite the apparent banality and uniformity of the *miir*, ways of arranging them are seen to be culturally different. In the Brao studies by J. Matras-Troubetzkoy, the village parcels are cut into long, narrow and regular strips oriented in the direction of the slope so that each family's parcels of land are equivalent in quality. The total grouping of a family's land is scattered in bands over the whole clearing, rather than comprising a large section with a single tenant. This mode of division means that all the adjoining strips traverse the same variations in soil, thus precluding that households on the same field have unequal advantages.

Among the Tampuan, the choice of the position of the swidden is made by a single family. This choice is dictated by the location of the house in the village, such that the spatial distribution of the fields is the direct projection of the social-spatial organization of the living area. This reproduction of the structure of the village serves to perpetuate a uniform dispersion of the families in the middle of the forest. The fields of those belonging to the same matrilocal lineage living in the north-east will be together, but separated in the north-east of the social environment. The spatial proximity of the agnates translates into a system of mutual aid in the bosom of the enlarged matrilineal family, the lineage or the clan. This territorial division is clearly seen in the hamlets built traditionally either in square or oval form, where the retaining of a cardinal point by a clan sets the model for the cultural ordering. In other words, each group constituting a family, social, ritual or economic unit is also a territorial group that manages a forested space consisting not only of the field, but also of its surrounding boundaries, which are tacitly known. Among the Kraveth, each village is arranged from a common field situated preferably at the bottom of a thalweg cut by a stream. They use the distribution of the individual family parcels of the field as a means of projecting into the surrounding forested space. A system of family rotation over the parcel in each new clearing permits each household to maintain the boundaries of a part of the field (barrier protection and traps for small mammals) and to invoke the known local spirits in the adjacent patch of forest in order to preserve cultural unity.

From these few comparisons, it is found that the search for economic effectiveness in a set of environmental circumstances does not imply a single form of social practices and social connections. The social systems that are present in Ratanakiri embrace the natural ecosystems, and not conversely. In other words, even in a condition of total dependence on nature, this is re-ordered according to the socio-cultural specificities of the popula-

tion. Time and space are each time seen through the same practice of slash-and-burn agriculture in the same forest landscape.

The period from March to May remains the only time when nothing is harvested from the *miir*. Without engaging in a discussion related to the cultural diversity of the *miir*, let it simply be said that extra crops generally amount to from one quarter to one third of the total production.

The statements of the villagers are under-estimates, for it is unseemly to boast of a good harvest in front of the spirits, on the one hand and, on the other hand, the gleanings of early maturing early rice (*ambok*) are not taken into account. These consist of the baskets of rice taken by relatives, friends and outside day laborers, as well as what is exchanged before the end of the harvest. In our calculations, the quantities were calculated after all the late rice was in; effectively at the beginning of December. Nonetheless, recourse to the memory of the families was inevitable as regards the early varieties because they had already been consumed three months previously.

Variations in the size of the fields differ to a large extent. Surprisingly, the only reason given by the villagers is laziness, as nothing prevents anyone from enlarging his field. Between two nuclear families, the harvest can be the same or up to three times more. In fact, certain fields suffer from harvest that is lost when the adult members are disabled, do not benefit sufficiently from the system of labor exchange or when they are engaged in other activities, for instance, producing crafts for sales or having outside employment (a typical example is the case of the husband in the military or military police). According to the Tampuan, one basket of rice sown on basaltic soil produces up to thirty-five baskets of rice. The yields are somewhat less among the Jorai and the Brao because they do not have the advantage of such good soil. In a period of normal work (that means, three to four hours of harvesting per day), a person hardly collects more than fifty liters; however, in a busy period, the amount harvested can increase to 100/150 liters a day.

The reported estimates come from eight families: four Kraveth and four Tampuan. The first reside ten kilometers from Veun Sai to the north of the Sesan river and the second on the plateau, eight kilometers east of the capital. We deliberately chose households where both the man and woman are active and did not include invalids, bedridden people or adopted relations. The average yields are from 1,450 to 1,700 kg/ha on the new clearings and from 1,600 to 2,150 kg/ha on the older clearings.[2] This difference is more perceptible among the Brao than the Tampuan, who enlarge each year a part of their individual terrain while abandoning and older portion. The inhabitants of the low plateau have higher yields and the differences between the five families interviewed are less than those from the district of Veun Sai. But as a general rule, if 1,600 kg of paddy constitutes for this year (remembering that this is not an exceptional year) a minimum average for a household of six people (four children), there is a little more than 1,100 kg after pounding. These figures compare favorably to the national average of yields for irrigated rice, which was 1.2 t/ha in 1987, 1.14 t/ha in 1989 and 1.32 t/ha in 1991.

An example of the food situation is given by the family of man called Klieng, made up of five members. They cultivate 0.53 ha and produce 1,150 kg: each member consumes 630g of paddy each day (three meals), that means a little more than 400 g per person per day. The family of the chief of Phum Chon achieved slightly more. He manages to have rice up to the next harvest, which was particularly arduous this year because the rains began late and the early rice therefore grew slowly. In other households, one is able to sell a small surplus of late rice. Certain families of the Krung, Jorai and Tampuan (who have different soil conditions) have had empty grain stores since last June and have to overcome this temporary rice shortage by cultivating vegetables and tubers and by collecting food in the forest. While food shortages bring back memories of the Pol Pot regime in the 1970s, diets at the beginning of the wet season are lean and there is little other solution than to go to the forest. The access to natural resources is, according to the natives, only a question of investing time.

These estimates, with their margins of error, show that the belief in the under-production of shifting cultivation is a myth. This is not only connected with prejudice, but with the difficulties in gathering information in the area. Nevertheless, identical and even higher yields have been reported in other regions of South-East Asia. It appears frequently in Ratanakiri that the neighboring lowland rice farmers are confronted by bigger annual variations of harvest. These fluctuations are made worse by the risks inherent in all monoculture (climatic vagaries, floods, insect invasion, death or illness of the draft animal, etc.). The proof of this is that the lowland rice farmers still come to buy rice from the highland farmers, and not the reverse. Following the bad agricultural season of 1994, the most heavily affected inhabitants were from the plains (Laotians, Khmers and tribal populations recently converted to lowland rice farming) and they were forced to ask for government assistance. In December, the Brao and the Tampuan practicing irrigated rice farming come to Kraveth territory to work a few days in the swiddens in exchange for a few baskets of rice. The merchants of Ban Lung and Veun Sai also go to the forest villages to buy whatever rice surplus that may be available. The Proto-Indo-Chinese who have taken up irrigated cultivation are not mistaken in always conserving a small parcel of swiddens, which they call their security field.

The effectiveness of swidden agriculture and the way it can reproduce itself has been recognized in different parts of the world, on condition that the choice of areas and their period of utilization is apposite (avoiding primary forest, respecting the restoration period, not cultivating for too long on the same area) and the demographic pressure on the ecosystem remains weak. When this increases, the period of forest re-growth separating two periods of cultivation shortens. The yields are then inevitably lower; forest gradually gives way to savannah and the grass stage *(imperata)* continues to increase at

the expense of tree cover. In the absence of such constraints, certain authors have shown that there was a greater specific richness in the swiddens than in the intact forest. The professional swiddeners, who are too often taken for nomads, do not destroy the forest in an uncontrollable manner, nor do they harm the fertility of the soil when the regenerative phase of the forest cover is traditionally not less than twelve to fifteen years.

The low population density of the province (5.55 inhab. per km^2) could allow us to believe in a reasonable utilization of the forested space. If we look at a map of the 1950s, the dispersion of people was a characteristic trait of Ratanakiri. The distribution of the population was very unequal; more than half the territory was uninhabited (open forest, mountains and forest on the north-eastern part of the river basins). The government began to forcibly move the villages of three northern districts to the banks of the Sesan in the 1960s, hoping thereby to settle more than 6,000 people. There was a subsequent intense usage of the forests to the south of the river. The same phenomenon was reproduced on the western edges of the plateau, where numerous villages migrated following the creation of the plantation on the Labansiek estate. The new human concentration in this area of this relatively sparsely populated zone led to the clearing of slopes and accelerated their erosion. So that now the center of the plateau is less populated than the edges and the inhabitants have a tendency to move closer to the road. Elsewhere, there are 600 to 850 inhabitants in Jorai, Krung and Tampuan villages in the districts of Bar Kaev, Ou Chum, and Ou Ya Dav. These abnormally high figures indicate an exaggerated density of occupation of cultivated land, as in Lung Khung with 847 inhabitants in the center of the plateau, such that the landscape subjected to accelerated human activity appears like a vast and desolate fallow. Human pressure in certain areas is not the only cause. In Ratanakiri, the commercial crops (rubber, oil palm) will continue to increase, as well as migration trends, which may endanger the use of the land by the native populations. A crucial problem that is surreptitiously coming to light is the reduction of access to natural resources in the villages around Ban Lung, a problem more worrying in that the ethnic minorities can no longer procure the new means of production that will be necessary for them to modify their practices, eliminate weeds, maintain soil fertility and put in place a more stable system of production that combines tree-growing, livestock production and annual polycultures.

Future projects in Ratanakiri need to reconcile agricultural development and protection of the forest environment. But, as has been said, nothing will guarantee that the actions undertaken will achieve this if the particular conditions in which the concerned populations work and make their living are not taken sufficiently into account.

Notes

1 According to villagers, the sparse populations of nomadic hunters called the Bailevin lived there, the invisible tribe gifted with fantastic powers and capable of transforming themselves into wild animals at the sight of the enemy.

2 The calculations were done as follows: (quantity of early and late rice) x 0.6/(area of rice planted). We estimate 0.6 kg per liter.

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CHAPTER 3

Health, Women and Environment in a Marginal Region of North-Eastern Cambodia

THE ABORIGINAL POPULATION OF RATANAKIRI IS COMPOSED OF MINORITIES speaking different languages, living in the tropical evergreen forest and distributed in small groups, the average number of which varies from 30 to 70 nuclear families.[1] They have developed over the centuries an intimate relationship with their natural environment by experiencing its potential resources, evaluating appropriate periods for its exploitation, as well as discerning its limits. Among the various activities connected with slash-and-burn cultivation, gathering, hunting and fishing, women play a prominent role. They are also independent in many aspects of their life, particularly as concerns food, health, childcare, traditional education, clothing and most of the agricultural work.

However, a significant trend during the past five years has been the change in the use and ownership of natural resources, particularly in the neighboring villages close to the provincial small town of Ban Lung. Utilization patterns are increasingly shifting from local use for basic needs to non-local use for commercial objectives. The implications for sustainability arise from the fact that as resources are diverted to meet distant market needs, their relations with local ecosystems and their local community involvements start to change. In the coming years, this situation will spread to more and more villages.

In this context, both the traditional and the changing living conditions of women lead to various forms of exposure to health problems. A dynamic understanding of gender and environmental relations therefore becomes an important issue for health awareness and improvement.

Situation and historical background of the province

Ratanakiri ("the mountain of precious stones") covers some 12,561 km². It is the seventh largest region (out of 24 provinces and Phnom Penh municipality, in 1995) according to area. Located in the north-eastern part of the country, 600 kilometers from the capital, it is situated between South Vietnam to the east, Laos to the north, Stung Treng and Mondolkiri provinces, respectively, to the west and to the south. Two rivers flow from Vietnam across the territory from east to west and join the Sekong, a tributary of the Mekong. Between the Sesan River and the Laos border, the mountainous area is covered by evergreen forest (total area in the province: 5,636 km²), while a tropical deciduous forest (total: 4,858 km²) is to be found to the south of the Srae Pok in a huge plain. At the center, between these almost uninhabited zones, a highland plateau with red basaltic soil (120,000 hectares) is characterized by a secondary forest (young forest regenerated after shifting cultivation and clear cutting). Woodlands and mixed forests (composed of deciduous and evergreen species, of which deciduous trees represent more than 50% of the stand) are located at the extremities near Vietnam and Stung

Treng. Most of the tribal population is concentrated on that fertile land and practices swidden agriculture. In the surrounding valleys, the Lao people cultivate irrigated rice and gardens *(chamcar*) on the seasonally flooded areas of the river banks. In Kun Mum district, at the western side of the province, a large Khmer community, previously employed in the Labansiek hevea plantation in the 1960s, has recently settled to cultivate paddy fields.

The tropical monsoon climate of the central hilly region is characterized by a number of original aspects: first, a clear alternation of dry and rainy seasons, plus a temperate intermediate period (October-January) with cool nights and cloudless days; second, unlike the rest of the country, a dry, pure and bright atmosphere. The precipitation, with a certain unforeseen dimension of irregular rainfall in different parts of the territory, is abundant: all the areas receive between 2,000 mm (highland) and 2,900 mm (eastern plains and northern mountains). Nearly 96% of the rain falls from May to October. In January, the drought is total and the temperature falls to 15°C, while the maximum temperature rises to 40°C in April.

The old Cambodian maps and landscape descriptions mention the actual province as a wild forest inhabited by dangerous animals and various semi-nomadic, belligerent ethnic groups.[2] In the past, a few explorers, travelers and colonial administrators crossed the territory but without having undertaken any systematic physical or human studies.[3] The place was believed to be mysterious and shielded from the outside word. In fact, archaeological and historical data tend to prove that there was a large amount of exchange between Thais, Laotians, Chinese and forest dwellers, even if the region was relatively unexploited and deserted, despite its natural wealth (precious woods, gems and rich land). At the end of the 1950s, the Sihanouk government began to show interest in the development of Ratanakiri (gem mining, roads, hevea plantation). One of the aims was also to settle, control and assimilate the highlanders in the newly independent kingdom. Despite a persuasive policy against the tribal minorities, it was still difficult to convince the Khmers from the plains to shift to this unknown and reputedly unsafe area.

One of the reasons for having very few migrants until recently was also the high prevalence of many dreadful diseases and the total absence of any health delivery system until the mid-1960s. In the 1970s, the Khmer Rouge regime, whose political indoctrination started in Ratanakiri, used to deliver a good supply of malaria drugs, but it had simultaneously murdered indigenous peoples, often eliminating female traditions and skills in healthcare. After their retreat in the 1980s, the supply of drugs was not continued. Even today, the health situation is still one of the poorest in Cambodia.

Demographic estimates and health synopsis

Because of the recent Pol Pot history of war and suffering, the Cambodian population decreased between 1970 and 1979. It has been said that more than two million people died due to bombings, starvation, mal-treatment, executions and diseases. According to estimates made on the basis of the 1980 overall demographic survey, the total population of Cambodia, with an annual growth rate of 2.8%, has begun to increase again and had reached 9.6 million in 1994. The population distribution throughout the country shows that more than 80% of the people live in the ten main provinces of the central plains areas. At the end of 1994, less than 70,000 people were living in Ratanakiri province. This marginal region is one of the four least-populated, with less than five inhabitants per square kilometer (but with significant spatial variations), while the nationwide density is 48 persons per km^2. Farther south, Mondolkiri, which is the most deserted region of the country, has less than three times the population density of Ratanakiri.

Table 1: Population distribution in Ratanakiri

District	Households	Total Pop	Communes	Villages	Female Pop.
Ban Lung	1,992	9,319	3	16	4,159
Andoung Meas	760	5,166	4	21	2,704
Bar Kaev	1,798	8,785	6	34	4,674
Koun Mom	1,281	6,114	6	23	3,201
Lumphat	1,563	7,707	6	27	3,966
Ou Chum	1,896	9,072	7	37	4,927
Ou Ya Dav	1,544	8,330	7	30	4,317
Ta Veng	495	3,138	2	21	1,699
Veun Sai	1,432	9,133	9	34	4,222
Total	12,761	66,764	50	243	33,869

Source: United Nations Transitional Authority, Cambodia, June 1992

With 50 communes (*khum*) and 243 villages (*phum*), the average population per village is 274, while the female average is 139. The current increase in population growth is mostly due to the high birth rate, the cessation of political conflict with the Khmer Rouge guerrillas and the increasing Khmer and Sino Cambodian migration because of land availability and potentially lucrative opportunities with wood, gold and international trade and smuggling. Among the minorities, a couple will have during its fertile life roughly at least eight to ten children, but it is a common feature that half of them will die before ten years of age. For instance, in the village where I was staying, 96% of the 147 married couples had experienced an infant death and 69% more than one. The result is a population distribution in which around 50% of the population is less than 18 years old, and 20% less than five years. For similar reasons (deportation of men, Khmer Rouge massacres, etc.), the number of females to males is slightly higher in

adult groups. Many tribal families are now headed by women. This sex ratio has implications for the educational and health programs of NGOs and the government that are supposed to be targeted to reach women and children.

In this remote area, while infant and child mortality rates are very slowly decreasing, the adult health is not very good, especially among women. The main causes of maternal mortality, reported from January to September 1993 by the Ministry of Health, were hypertension, infection, malaria, post-partum hemorrhage, ruptured uterus and complicated pregnancy. The regional life expectancy at birth is much lower than the national average, which is 47 years for men and 49.9 years for woman. Currently in Ratanakiri, as in the whole country, there is neither effective registration of births and deaths, nor cause of deaths. Villages are so scattered in the forest that it is a hard task to strictly control birth, morbidity and mortality rates. The numbers of reported maternal and infant deaths constitute less than 3% of expected deaths. That is why the infant mortality rate (110) and the child mortality rate (166) registered by the National Center for Hygiene and Epidemiology (CNHE) at Ratanakiri in 1987 are very far from the reality. Statistics derived from the provincial hospital and from the eight district primary health centers (PHC) are poor. All the rates are biased towards those who have access to (in physical, geographic, economic, social and cultural terms), and are willing to seek treatment in, those public health facilities.

The five main causes of IMR and CMR are premature birth, delivery complication, diarrhea and, most of all, acute respiratory infection and malaria. The expanded program of immunization is a prospective project: only poliomyelitis vaccination has been partially achieved in the more accessible tribal hamlets and in the Lao/Khmer settlements along the rivers and in the valleys. Neonatal tetanus, pertussis and measles are still prevalent. The main drawbacks reside in the difficulty to inform the families and to be sure they will be present when the mobile vaccination workers plan to come, because most of the people are not in the village during the day. And, throughout the entire agricultural season, which lasts from eight to nine months, the village breaks up and most of the family members sleep in their own scattered fields. Apart from this, there is no cold transportation for vaccines and the medical workers do not go (are not willing?) to the more distant places that can only be reached after a few hours (sometimes more than a day) of trekking.

The most prevalent diseases women have are helminthiasis and acute respiratory infections. Lower tract infections prevail even during childhood and mostly in the cool season between October and January. This vulnerability is increased by the habit of tobacco smoking, which is rampant among all the tribal minorities. Girls start using small pipes given them by their parents at the early age of six or seven years and then become susceptible to heavy throat irritations and lung disorders. They use a very strong and insufficiently dried tobacco that is usually grown in the family field.

Pulmonary tuberculosis poses a serious threat and a regional/national tuberculosis control program was recently launched (1994-1997). Available data reveal that women are more infected than men. Spitting is a common practice, even inside the house, and the idea of oral contagion is refused. Worst of all, the disease is disavowed by the population, particularly in its earliest stages. There is a tendency among patients who receive treatment to conceal the disease from their family: a social disruption is therefore caused whenever health workers come to give medicine and try to detect new cases in the village.

Endemic goitre is a significant problem, notwithstanding the fact that salt has always been a commodity of exchange and trade between Vietnamese and Chinese merchants and the forest dwellers. In fact, the salt coming from Vietnam does not contain sufficient iodine. A survey undertaken in two districts of Ratanakiri by the Cambodian Nutrition Health Surveillance (1989) demonstrated an overall population prevalence of 11%, of which 88% were women.

Malaria is considered to be one of the major health problems in the north-eastern part of Cambodia. *Plasmodium falciparum* is found in 80% of cases, while *plasmodium vivax* is also widespread in the plains along the Sesan and Srae Pok Rivers. Pregnant women and children are particularly vulnerable to *falciparum*. Gem miners (zircon, gold), new migrants and wood-cutter families have the greatest risk and visitors who make a short trip to the province are more liable to be infected: the issue is often fatal when they return to the capital, where there is no proper treatment. Because of the crucial danger of *psalmodium* malaria, every primary health center can carry out laboratory investigations but the shortage of drugs is an acute problem. The peak season is the beginning of the rainy period (May) and then from September to January. It coincides with the most important agricultural working period, when villagers are busy and scattered in their field houses.

Table 2: Malaria seasonal report in Veun Sai district

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
falciparum	42	35	21	19	69	40	25	35	44	51	48	47
vivax	13	8	2	-	8	4	4	8	17	12	15	11

Sources: Health centers, 1993

Cholera is endemic in Ratanakiri and the last outbreak was registered in Ta Veng district in 1993, at which time a few deaths were reported. Typhoid is not so common as in the more crowded rural regions and the big towns, but there have been epidemics in the previous five years in a few villages near the Sesan in the northern districts. Last but not least, leprosy is hyper-endemic. There is an unequal geographic distribution in the province and the multi-bacillary form is prevalent in the eastern and central parts. Two

thirds of the districts have leprosy villages.[4] According to the people's perception, the disease is believed to be highly contagious. Likewise in Phum Chon, Ou Chum commune, 12 lepers are kept apart along with their family in an isolated hamlet and are forbidden to enter the huts of their original village. Once a month a local NGO sends adequate drugs; but when the victims get cured, they are seldom allowed to re-integrate into their native place.

This incomplete panorama shows just the most visible health-related problems among the highlanders. The understanding of their social and working conditions, bound by an intimate relationship with the natural environment, can provide some clues regarding the exigency of the disease patterns that affect women in particular.

Gender status and male/female relationships

The position of women in village society varies slightly from one community to another. In this paper I will focus on the Tampuan, a Mon-Khmer language group, who constitute the main indigenous population in Ratanakiri. The general ethnic distribution is given below.

Table 3: Population distribution by group and by district

Pop/Dist	Ou Chum	Bar Kaev	Ou Ya Dav	Andoung Meas	Ta Veng	Veun Sai	Koun Mom	Lumphat	Ban Lung
Brao	x	x	x	x	3,350	823	x	428	737
Chinese	x	x	x	x	X	190	x	x	?
Jorai	x	2,532	8,399	3,079	X	x	x	x	x
Kachah	x	x	x	1,655	X	509	x	x	x
Khmer	8	35	41	54	4	54	3,212	357	5,631
Kraveth	x	x	x	x	x	1,210	x	x	x
Krüng	6,813	x	x	x	602	1,688	2,600	1,080	647
Lao	x	55	29	303	26	3,664	360	1,664	366
Lum	x	x	x	x	x	41	x	x	x
Phnom	x	x	x	x	x	x	x	32	x
Tampuan	2,932	6,724	x	703	x	445	24	3,369	2,171
Vietnam	x	40	35	37	x	6	x	x	635
Total	*9,753*	*9,386*	*8,504*	*5,831*	*3,982*	*8,630*	*6,196*	*6,930*	*10,187*

Source: District educational centers and personal enquiries, 1994

In terms of their own conceptions and terminologies, the Tampuan divide themselves in two major subgroups: the lower Tampuan, who live in the highlands, and the upper Tampuan who live on the slopes and in the valleys near the Sesan River in Andoung Meas, Veun Sai and the north of Bar Kaev districts. The former practice exclusively swidden agriculture while the latter, since the time of Pol Pot, are occasionally involved in irrigated rice cultivation as well. The present study is solely concerned with the lower Tampuan.

The traditional social organization is based on the village having its own forest territory, where every nuclear family clears a plot for agricultural purposes. The main crop is rice, but more than 20 to 30 varieties of vegetables, green leaves and fruits are also grown in the temporary field (*miir*). Every one or two years, the piece of land is enlarged and, after three to five years, the family shifts to another place. Previously, the whole village population would move every 10 to 15 years when the fields had become too far from the village or subsequent to special occurrences (epidemic, death of the headman, etc.), but today this semi-nomadic life tends to be reduced. Every village is inhabited by people belonging to various exogamous clans (*pong*). Although the clan structure is important for the individual position within the community, the basic social unit in village life continues to be the nuclear family. The spatial village organization consists of different groups of houses, the members of which belong to the same lineage: a big house inhabited by the elders, the parents and the unmarried girls, around which are a few small huts where unmarried boys and married daughters with their children and husband are living. Such a group of houses (*Moin kwa moin oi*) constitutes an independent economic and ritual unit. Sometimes they share the main house – or only take food together – but every married couple has its own rice granary and performs its own religious ceremonies. The diversity of the family housing structure is then strengthened by the unity of a nuclear-oriented economy, which is in turn counterbalanced by the labor force exchange system within the lineage and among the related clans.

Tampuan society has a matrilocal, monogamous and matrilineal system. Males and females from the same generation and from the same *pong* call themselves brother and sister; sexual relations and marriage are strictly prohibited within this social unit, as it is regarded as incest. Outside the clan, alliances rely on the choice of the parents and young people as well, even if the prevailing traditional custom mentions a preference for the wedding between cross cousins of the first generation (mother's elder son with the daughter of the younger brother's mother). After getting married, the man settles with his family in-law. He will therefore worship the ancestors of his wife. But in case of a quarrel, the rules are flexible enough to allow the young couple to live separately or with the man's family. If one of the partners should die, the children stay either with their surviving mother or with her family, if it was the mother who died. Women formally hold property rights (domestic animals, house and valuable objects) and transmit the name from generation to generation. The inheritance is made from mother to daughters, with a slight advantage for the youngest one. In reality, in spite of this system that is apparently advantageous to women, the facts tend to moderate the woman's status: most of their possessions are controlled by men who enjoy the privilege of using them (animals for sacrifice and gongs, for instance), and many exceptions tend to modify the presupposed decision-making power of women regarding housing, healing and religious questions. It happens frequently that when the woman's family is very poor,

her husband compels her to join his own relatives; in this way, the children will be more likely to follow the work organization, restrictions (taboos) and prerogatives of the father's clan.

If the political and religious spheres are controlled by men, most of the women's decision-making processes are oriented towards domestic affairs. While men are connected with social activities and the outside world, women are more concerned with private decisions taking place within the household. The sharing of the economic sphere, which is quite impossible to distinguish from the social, economic and political components, is however more complex. Women's activities, described in the next chapter, reveal that they do have access and control over the whole production system, and more recently to the growing market economy system, by selling the products of their work (gathering resources, weaving cloth, etc.) themselves and spending the money they receive in exchange without referring to men. But here again, it would be misguided to generalize: different personalities create different situations and some families are more inclined to confine young women to domestic duties by giving them extra household and farming responsibilities and in this way preventing them from having contact with events and matters outside the household.

Gender discrimination appears particularly relevant in school education, newly introduced and promoted by the authorities. Parents are unwilling to give up their children, especially girls, for what is seen to provide but little in return. In the hundred villages to which I have been, I never saw any girls attending school. In fact, the daughters cannot be released for study as they are very much needed to carry out farming and household work: the girls are much more vital for village work than boys and cannot be freed from their numerous duties. Whereas the status of boys can be enhanced by their being prioritized for education and through the ensuing benefits, education is not considered so important for girls.

Women's activities: from the village to the forest

Women clearly play a significant role in the household and in the domestic food economy. As we have already observed, they are required from early childhood to participate in various tasks, while the boys are relatively free before the marriage. Girls fetch water from the village source, wash the clothes, take care of the small children, stay in the field for weeding and keep an eye on the crops, go to the forest to collect firewood and edible plants, pound rice, feed the domestic animals and walk to the distant market carrying a heavy basket on their back.

In their daily life, women are the first to wake up, before dawn. Rice pounding and winnowing are the primary daily activities and require more than one hour. Depending on the family size, they may repeat the operation in the evening. From six to seven years of age onwards, the daughters are asked to help their mother after having been given a

long crushing stick. Despite the apparent beauty of the scene, it is hard physical work that women must perform, even if they are pregnant or slightly ill. When the rice is ready, the married women boil it and prepare the first meal, which is taken around 8 a.m. Two other meals will be prepared late in morning and after sunset. In the joint family, women of different generations are likely to share domestic work with frequent daily variations: one feeds the children, another cleans the house and the courtyard, some fetch water, others cook separately or together, etc. But as we mentioned earlier, the nuclear family is more frequent and every woman must accordingly carry out these different tasks alone. After their morning duties, they will go, according to the season, either to the field or to the forest to gather edible plants and vegetables. Sometimes they simply stay in the village. The very dry season, from January to April, is the period for collecting wood and looking for green leaves, fruits and wild roots in the forest. The sight of a group of women walking in single file along the small paths is a typical scene during this period. At the beginning of April, families return to their fields, but the work is not brisk. During their free time, women spin cotton, weave colored blankets and adolescent girls prepare and decorate new water bottles. The beginning of the rainy season is a difficult time in terms of food availability (mostly bamboo shoots, mushrooms, leaves of water gourd plants and rice), and the living and working conditions are also arduous: water leaks through the damaged roofs, the atmosphere is humid and it becomes difficult to gather food resources in the forest. After rain storms, the village is muddy and it is hard to keep the huts clean. Every family has his own work rhythm but, at the end of May, rice seeds have to be planted. Likewise, once the men have completed the protection of the field with traps and fallen branches, and when the paddy (rice) starts to grow in June, husbands rely on their wives to oversee the crop, prevent animals from destroying the plants, weed regularly the plot, pick vegetables and the other crops (cotton, indigo, millet, corn), and start to harvest the first quickly growing rice varieties from August onwards. This situation becomes more strenuous when the man works outside as a soldier or a policeman. His wife will then have to carry out the work of the whole agricultural cycle, sometimes helped by female relatives.

Even if it would be misleading to allocate the respective participation of men and women in the agricultural cycle, domestic work and forest utilization, some types of work are nevertheless specifically male duties, while others are related more characteristically to women. Others can be executed by both of men and women. According to season and family size, variations may occur and it is not uncommon to come across women involved in the cutting of small trees or rice transport from field to village, tasks usually assigned to men. Contrary to what Jacqueline Matras-Troubetzkoy described regarding the Brao of Ratanakiri,[5] the division of labor does not seem to be equal in terms of gender. Men assume the most physical tasks in the field (cutting and burning of big trees), but not in the village and in the forest (collecting wood, pounding rice, for

instance). Moreover, a significant trend shows that men are more involved in occasional work while women are responsible for most of the permanent activities that require more time, presence, patience and endurance.

Women are definitively hard workers, but this does not mean that they are always busy, exhausted and toil like slaves throughout the day. The gloomy situations depicted by a number of NGOs tend to exaggerate the deprived conditions of women, because of the lack of comprehensive understanding, inadequate investigations and their viewing matters in terms of Western conceptions. Except for a few decisive agricultural periods, it seems that women are relatively free to allocate their time for work as they wish, and a certain solidarity among them reduces the strain of their daily duties. Regular periods of free time are devoted to rest, visits, conversation and leisure. The exchange labor system allows them to diversify their activities and therefore to avoid daily routine that would entail remaining alone in the house or in the field. From many points of view, women still have the control over their economic and domestic activities, which are not to be systematically perceived as a drastic constraint.

New occupations are developing among the Tampuan, Kreung and Brao women living near the town; they are becoming vendors at the market or are employed as domestic workers, daily wage-earners (rubber factory) and marginal workers (clearing of shrub lands, cultivation). But these recent changes in tribal society do not mean an automatic improvement in their living standard, especially when some of them – but only a few – turn to prostitution in the numerous brothels of Ban Lung. The health status of women is therefore a combination of environmental, climatic, economic and socio-cultural factors, among which we must now determine a few crucial emerging points.

Women, health and exposure to disease

In the Tampuan context, it is unsound to think of the person as an individual as commonly perceived in Western societies. As the anthropologist Joanna White cited in the case of a neighboring minority, villagers are defined more in terms of their role as part of a social group, both at the household and at village levels. Likewise, for illness due to supernatural causes, numerous people are involved at every decision-making level. The pursuit of healing alternatives may therefore have more to do with conforming to the general social order than to the will and decision of the individual patient. In Tampuan society, as in other ethnic minorities, various demons, ghosts and wandering souls are thought to supervise the acts of living people. House and village, field, forest and rivers are inhabited by spiritual beings and all circumstances and courses of action proposed by the villagers are subject to their wrath. Vulnerability regarding the malevolent spirits is obvious at certain stages of a woman's life, for example, childhood, pregnancy, delivery, and post-maternity.

The first months of life are the most uncertain. The baby will be fed exclusively with the mother's milk during the first year, unless she falls ill. A similar abstention can happen if the child contracts a disease (diarrhea, fever, etc.), in which case it will receive millet with sugar. In the second year, boiled rice will be added, along with green leaves. Theoretically, a child can receive the mother's milk quite long (four or five years), but a new pregnancy can interrupt breastfeeding. Weaning practices can thus be very brutal. In their first years, infants and children are frequently victims of deadly diseases. Quite a few could be avoided by using mosquito nets and warm cotton clothes in the cool season (children strangely remain naked during the night). Yet, most of the parents assert that children have to adjust to the way of life in the forest in order to develop natural resistance. This does not mean that the concept of prevention does not exist, even if it is not perceived through modern categories: allegiance to the ancestors, sacrifice to the deities, diet and promotion of adequate social behaviors are the main components of the traditional system of security and prevention.

If they survive, girls get married earlier than boys: the norm for the former seems to be at 16 or 17 years of age, and a child is born soon afterwards. The majority of births take place at home in a special little private house. The woman attending the delivery is assisted by two or three old ladies who have had many children in their life and who are experienced midwives. These traditional birth attendants know how to press the woman's abdomen during labor; they give vigorous massages, cut the cord with a bamboo stick, "heat" the woman in labor with hot water on the abdomen and with a fire pot below her, provide medicinal roots and give post-partum food restrictions for the next few weeks. Unlike during pregnancy, the woman may rest for a few days after delivery, but she has to limit her diet to rice, millet, green leaves, a few vegetables and hot water. Meat, fish, fruits, tubers and many vegetables are not allowed. In case of any delivery complication, the village midwives rely on religious healing behavior with chicken or pig sacrifices and the drinking of rice beer from a big jar in order to appease the devils. Nevertheless, access to health services is limited. And, the availability of an adequate and effective obstetrics ward is only found in the provincial town of Ban Lung. Thus, when the delivery does not proceed well, it is always too late to reach the hospital, not only because of transport and communication difficulties but also because of the reluctance of the relatives to stay away from the household for any extended period, especially on this very occasion when they have to present the new-born baby to the ancestors and the household spirits. In the people's perception, magico-spiritual interference is an important factor that causes the family to hesitate to seek help outside the village. Similarly when death is seen to be inevitable, it is important to be at home to die and not at the dispensary. This is related to the fundamental notion of retaining a harmonious balance between human beings and supernatural world,[6] and to the fear of the possibility of the spirits of the persons who die coming back, insofar as by departing

from the world far from the place where it has lived, the soul of the deceased will take revenge and disrupt his close and distant relatives.

It would be tedious to enumerate the numerous health risks women face by living in a remote area, in terms of lack of medical facilities and information, insalubrious surroundings and seasonal shortage of food. But the main point which must be mentioned is the nature of the relations between women and the natural/agricultural environment. On the one hand, it as been mentioned by many authors[7] that swidden cultivation necessitates more work than irrigated cultivation, but the system appears to be more secure in terms of different seasonal harvesting, food diversity and annual yield variations. This type of agriculture provides for six or seven months a year a good amount of various crops used as the daily staple diet. In fact, famines are exceptional, contrary to what occurred at the end of 1994 in some areas (Lumphat district) where villagers rely on irrigated rice cultivation with fewer paddy varieties and are thus more subject to flood, insect parasites, drought, and trade speculation. Women also have a good knowledge of the resources available in the deep forest as well as around their field. According to hospital staff, the relative food availability is confirmed by the scarcity of severe malnutrition deficiencies.

On the other hand, occupational and behavioral health hazards exist: drinking water taken from the streams or from small wells dug near the field is not always clean, even if this is not the case for the village water source with adequate construction and maintenance; promiscuity with animals (pigs, hens, dogs) is common; children's physical care is insufficient, notwithstanding traditional precautions, which are not in accordance with modern hygienic points of view. However, the Tampuan have been living for generations in Ratanakiri forests and in many respects they have learnt how to adjust and cope with their immediate environment and to reduce as much as they can the virulence of the diseases. Today, the contact with Khmer culture introduces a number of relevant changes: drugs bought in the market, cash transactions and new ideas are spreading in the villages. At the same time, demographic pressure on the fertile red soils of the highlands is about to thwart the existing fragile balance between woman and nature.

In future, one can wonder if the resulting ecological shifts brought about by intensive land occupation and the market economy system, both of which are introduced by the new settlers (Khmers and Sino-Cambodians), will result in the loss of other sources of food and nutrition that are contingent on the more traditional system of slash-and-burn cultivation and gathering. What will be the health implications for women? One can notice the beginnings of the dramatic changes that occur in the tribal villages located around the chief towns and along the sixty-kilometer road going from the provincial capital to the Vietnam border: land is subject to high speculation (cash crops, orchards, hevea plantation in Ban Lung, Bar Kaev and Ou Chum districts; palm oil company in

Ou Ya Dav district) and village territories are decreasing as matters proceed. Individual property titles sporadically granted by the authorities to the indigenous minorities become an opportunity for the Chinese and Sino-Cambodian businessmen to legally buy land at ridiculous prices. Differences in the interests and in the lifestyles of forest dwellers and migrants slowly lead to environmental degradation. And this cross-cultural contact is not to the advantage of Tampuan women, who are the most severely affected because they lose control of an important part of the surrounding village area where they are accustomed to gather, collect and cultivate food resources. While common and local rights of usage include women as equal partners and sometimes even as the primary managers, private property forms introduce women's exclusion from ownership and from control of natural resources. But, as Halesh Afshar noted,[8] the process of health development can be of benefit to women only if and when it addresses the double burdens of production and reproduction patterns borne by them. A project of this nature, which should take into account spatial and socio-cultural disparities, has yet to be implemented in Ratanakiri.

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Notes

1 This paper is a preliminary result of a mission in Cambodia from October 1994 to July 1995.

2 Etienne Aymonier, *Géographie du Cambodge*, Paris, 1876 and Pierre Bitard, Carte ethno-linguistique de la région de Voeunsai, Cambodge, Bulletin français d'extrême-orient, XXVII, 1, 1952 : 3-7.

3 The most relevant exception is Henri Maître, *Les Jungles Moï, Mission Henri Maître (1909-1911). Indochine sud-centrale, Exploration et histoire des hinterlands Moï du Cambodge, de l'Annam, de la Cochinchine et du Bas-Laos*, Paris, 1912, Larose, 578 pp.

4 This social ostracism is prevalent among all Proto-Indo-Chinese groups in Vietnam, Laos and Cambodia. Cf. Condominas, G. *L'exotique est quotidien*, Paris, 1965, Plon.

5 Matras-Troubetzkoy, J. Un village dans la forêt. L'essartage chez les Brou du Cambodge, Paris, 1983, Selaf, p. 343.

6 Information provided by Joanna White, anthropologist at the NGO Health Unlimited in Banlung, Ratanakiri.

7 G. Condominas, Ecologie d'un espace social en Asie du sud-est, *Etudes Rurales*, 89-91, January-September 1983; H.C. Conklin, *Hanunoo agriculture*, Rome, 1957, Food and Agriculture Organisation (FAO), paper 12.

8 H. Afshar, *Women, Development and Survival in the Third World*, London, 1991, Longman, p.2

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CHAPTER 4

Nature tamed: Symbolism and technical knowledge among indigenous populations in north-east Cambodia[1]

There are more than thirty ethnic groups in Cambodia who rely primarily on forest products for their resources and on the temporary cultivation of cleared plots. This population, estimated at more than 100,000 persons, is for the most part concentrated in the two north-eastern provinces of the country, Mondolkiri and Ratanakiri, which until the early 1990s were relatively free of external influences. These societies, which belong to the same cultural substratum and are of the same Proto-Indo-Chinese stock [Condominas 1983], have learned in the course of centuries of experience to master their environment, cultivating what is necessary for their survival and taking what was needed from the physical eco-system, while recognizing the limits of what is possible, and conceivable, to extract from the natural milieu. The well-preserved vegetative cover witnesses to this, apart from a few areas where the populations were deliberately concentrated. The aim of our paper is to show the intricate connections between religious factors and practices of environmental management, then to evaluate the real and potential abilities of ground-clearing societies to adapt to external demands henceforth promoted by various development organizations. Reciprocally, it must be seen to what extent attempts to improve the living conditions of the aborigines are two-edged, and irreversibly condemn the future of a lifestyle in which materiality, symbolism and religiosity cannot be arbitrarily separated.

We will examine the Tampuan, the largest group in numerical terms with roughly 15,000 persons, who live in the fertile basaltic highlands in central Ratanakiri province. The Tampuan are scattered in villages with from 50 to 500 inhabitants. Each village, which is subject to regular resettlement, has a territory composed of the group of houses, the surrounding forests and the cultivated fields. The social environment of the Chom *phum* – more than 400 inhabitants, located ten kilometers east of the provincial capital –, where we stayed for several months, will serve here as an illustration. This study represents only a short introduction to a few of the close ties that exist in the cultural, social and ecological milieus. Also carried out were an analysis of cultural practices [Bourdier 1995a], perceptions of time and space [Bourdier 1995c] and general expositions of the living environment and the system of organization of the indigenous populations [Bourdier 1995b and e].

The development of space

What follows is intended less to describe an itinerant cultural practice *per se* than to delineate certain socio-cultural factors that condition its employment. In a region of irregular relief such as Ratanakiri, ground-clearing is a convenient procedure by means of which it possible to develop soils of very diverse qualities and uneven patterns. In

the absence of irrigation and rain water drainage, it is one of the favored modes of developing spaces that are of difficult access, where permanent cultivation would require enormous means that are difficult to obtain, or simply inconceivable. It requires a minimum of technical equipment, without draft animals, without plows or large implements: the range of tools among the Tampuan is limited to the indispensable machete (*mok*), the axe with handle (*kal dong*) the curved long-handled knife (*chaenouth*) and the digging stick (*romol*). At the same time, obligations are many, ranging from the management of the field to the dispersion of village society in the course of the agricultural cycle. Certain agricultural activities are physically strenuous, for example, the felling of trees and repeated clearing and weeding, and can at times be dangerous, for example, the burning a plot. The work to be done by a Tampuan practicing itinerant slash-and-burn agriculture requires more time and energy than is required by rice cultivation in the Cambodian plains. While the rice field only includes a few paddy varieties, the freshly cleared ground has an agricultural richness and diversity that is at least as great, and perhaps greater than, the *chamcar* (mixed farming on the river banks) of the Khmers and the Laotians. It appears to be less orderly than a field in the plains, although there is a logic in the selection of sites and spacing, but this is an indication of a remarkable agronomic diversity.[2] In short, every freshly cleared ground is composed differently, favoring one or another crop alongside rice, the nutritive plant par excellence, and at least thirty plants and cultivars can be found on a single patch of land cultivated by a single family.

The Tampuan, like other groups in the region, always bear in mind that the ground they clear in the forest is temporary and that its future is to return to its natural state. The freshly cleared ground that is cultivated is called *miir*, and after having been abandoned it becomes *chiumpar*, that is, the land where young trees are growing, until it would once more be *pri* and then *pri kara* (*pri* = forest and *kara* = mature), forest that can again be cleared. The forest is, in effect, the realm of the souls of recently deceased persons, ancestors and, above all, of spirits and god the creator. These supernatural entities, which are most often identified and localized, dwell in differentiated spaces that give rise to a genuine symbolic geography of places. An extremely rich and complex mythology explains why the supreme god, unable to himself watch over human society, created the spirits of the forest and lent them esoteric powers so that they could control the machinations of men, in particular respective of nature. Accordingly, the land traditionally belongs to no one; rather, it is temporarily "loaned" to those to whom the spirits, under certain conditions, give their consent.

The different agricultural activities follow an invariably respected chronological order. Work begins in December/January with the search for a site and is completed in late November or early December with the arrival of the monsoon. The agricultural season begins in the dry season and comes to an end after the rains have subsided.

Every family has a margin of freedom in deciding, within the limits of climatic conditions, as to the organization of working time and the management of its field. This feature, which is expressly asserted, is more than a perceived advantage: it is the expression of a way of life in which the relation to time is not experienced as a constraint, but rather as a "predisposition"; work is not an end in itself, an unavoidable necessity, but a manner in which to apprehend life and to enter into a continual relation with the encompassing natural milieu. When a festival takes place in the village or in a neighboring field, nothing prevents attendance and work that has begun is postponed to the next day, or the day after that.

The choice of a site takes two factors into account: a terrain that is suitable in terms of agronomy and a place where the spirits of the forest accept human intrusion. These two considerations may appear to be independent of each other, but in reality they are one. The logic of the Tampuan *Weltanschauung* does not discern nature as an autonomous sphere in which the presence of man is only perceivable through his knowledge of it. Our naturalist view does not preclude thinking that the phenomena occurring in nature are closely linked to human activities. For, in indigenous cosmology, there is a continuum between human beings and beings in nature (spirits of the forest, plants, and minerals) and the life of one cannot be enacted without relation to the other. Furthermore, any land that can be potentially cleared, even should other prohibitions be imposed on it, is a place where supernatural entities dwell and participate in the order of the world and its shaping, its fertility. The spaces where clearing has not been envisaged (for example, those covered with sparsely wooded forest and savannah), on the other hand, are devoid of any "supernatural" presence and, consequently, are unproductive.

Decisions taken concerning the appropriate site are not the result of chance and are subject to lively discussions that at times include not only the concerned family but the "respected men" of the clan (*Kra* or *Jha phum*) or, in the case of indecisiveness or contention, the headman of the village. At Chorn *phum*, every residential unit has its cleared grounds in a perimeter, the orientation of which depends on the spatial position of the unit in the village. This is the first framework (a lineage area within the social environment of the village) within which each nuclear family traditionally chooses its own site. There follows a converging of the cleared grounds belonging to the enlarged family: to the spatial proximity of individual houses (*mon hoy*) gravitating around the main house (*mon kwa mon hoy*) within the residential unit thus corresponds a spatial proximity of cleared grounds of the same nuclear families related by maternal lineages. These individual *miir* are seldom occupied by a single tenant and are clearly separated by bushes, forest or thickets, thereby giving the cultivated landscape a particular configuration in the form of clearings in the forest cover. Each house in the *miir* (*pak poo miir*) is therefore a place of passage and sociability where the fam-

ilies can stop on their way, rest, refresh themselves and engage in conversation. By the same token, proximity facilitates mutual assistance in domestic and agricultural tasks when certain activities must be accomplished in a short time (burning, weeding, etc.).

The forest adjoining and encircling the village (*pri kiom kiom choraux*) – where cattle go to graze and where women and children gather diverse forest products, where the graveyard is located – is exempt from any cultivation. The freshly cleared grounds are thus situated beyond this traditionally "protected" zone, extending over a radius of 600 meters in the case of Chorn *phum*. This security barrier of forest is to be found in most villages on the plateau, unless the reduction or limitation of available territory forces the villagers to encroach upon it. The latter phenomenon appears mainly in the Tampuan settlements located along the trails suitable for traffic or near lands dominated by the Khmers. A portion of these wooded areas constitutes sacred forests where spirits dwell and are precincts where trees cannot be cut without incurring their displeasure. One must nevertheless acknowledge that the inviolability of these forests or of specific trees can be subject to reinterpretation, and ceremonies have been described to us that were intended to "remove the spirits" who have become overly obstructive and prevent any human activity.

The search for land to be cleared is not undertaken at the last moment, nor is it spontaneous. In the course of wandering from place to place in the forest, there has been time to compare several places and to locate a site that seems to be adequate in terms of physical, edaphic, pedological but also immaterial parameters, for one must not offend the spirits of the place. Invisible by essence, the spirits can assume an animal appearance or an anthropomorphic form in dreams. To obtain their consent or refusal, a common ceremony consists in clearing a small patch of forest and waiting for the spirit(s) to manifest through interpretable signs. Various divination rituals are at the same time considered to ensure what is presumed to be a good choice. Once the pact has been concluded, the new occupant takes symbolic and material possession of the land. Moreover, to establish oneself temporarily or for a longer period in a place signifies *de facto* the commitment to perform several ceremonies in the course of the agricultural cycle.

The clearing of a new forest plot represents the longest and most arduous labor. However, it is not the most onerous for the Tampuan, who prefer a strenuous effort, but one which is much more prestigious for the man who can flaunt his virility, to a work that exhausts through monotony, such as weeding, a task willingly left for the women and adolescents. Prior to any clearing activity, each family must symbolically receive the usufruct of the land. This is the *changkal miir* ceremony intended to appease the spirits of the forest, to ward them off, to prevent the occurrence of accidents when trees are felled. An animal is sacrificed, a jar of rice beer is opened and members of the enlarged family are invited. *Chen miir meinjarr* means literally a prayer, a field, and a

reserved place. Several invocations are made to ancestors and spirits to the purpose of informing them of the impending human intentions. The spirits of the forest are called upon to leave for more distant places and not to thwart the projects to be undertaken. The plot is then marked out by making notches in trees and placing green branches crosswise so as to *signify* the site. This ceremony is followed by prohibitions to fell trees in the vicinity or to work in the fields the next day.

The period for felling average and large-sized trees, without uprooting the stumps, extends over four to eight weeks, with numerous breaks. There is no hurry and the men can use the time from the end of December to the end of March to complete this work. No other agricultural activity takes place during this time, if not the gathering of tubers and the manioc from formerly cleared grounds. The felling most often begins in a joyous atmosphere: the days are not too hot, it is festival time in the village and the recent harvest provides ample food. Festivities, rest and work – in which men, women and children take part – follow one upon the other and the solidarity among the villagers is particularly heightened in this period in which social ties are intensified and symbolic links between man and nature are renewed. The large annual village ceremonies are held in this period; one or several buffaloes are sacrificed, rice beer and alcohol are shared, the fermentation of which is compared to the process of cosmic transformation of earthly and celestial waters. In preparing and then consuming the beer, the men and women accomplish a sacred act and participate in the advent of the rains, thus in the taming of nature.

The burning takes place with the help of relatives and neighbors, but without elaborate ritual ceremony. The borders are cleared a bit more in order to ensure the effectiveness of the firebreak, and tension is to be sensed in the team at work. At the end of the day, the centers of the fire extinguish little by little and the participants return soot-covered to their homes, at times reassured by the way things went, at times disheartened by the difficult prospects of having to rekindle the small fires in the unburnt places. A work prohibition in connection with religious matters will be respected the next day. When the ashes are cold, the family completes the burning if it was partial, then proceeds to clear the land. Several ceremonies can take place, the most important of which is the anointing of blood-soaked rice (or unction of seeds) that consecrates the end of the preparations of the *miir* and the beginning of rice germination. After this, the different plots of the *miir* are very attentively examined so as to decide the distribution of the cultivated species.

The ground-clearing groups in Ratanakiri collect rice varieties. It should be observed that such a concept of diversification is contrary to the idea of the exclusive employment of a limited number of cultivars selected for their high yield in optimal conditions. The different categories of rice are subdivided into early and late varieties, which make it possible to lengthen the harvests (end of August to beginning of

December). Each of the varieties also corresponds to a more or less desired consistence and taste[3]. The preferred rice among the Tampuan (and that of the ancestors, for its texture and flavor) is *vang*, but it is unfortunately more contingent upon the vagaries of nature because it requires greater and more regular rainfall than other rice varieties. The lengthening of the harvest time together with the diversity of chosen varieties increases the chances of having a minimum harvest in spite of the unfavorable climatic conditions. One of the reasons for which several varieties are maintained is thus to obtain rice with varying maturities. In 1994, the late varieties were damaged because of the lack of rain after September, but the early varieties received sufficient water in July and August to allow of an acceptable harvest.

Every nuclear family has its own seed reserves stored from the previous year in the loft of its house on the cleared ground. Rice can produce several flower-heads from a single seed, which is of importance to the ground-clearers in Ratanakiri, who avail of lean surpluses and judge their harvests less in terms of yield per area than in the multiplication of seeds planted. The sowing season represents a neuralgic point and a complete ethno-meteorological forecasting system has been developed for this occurrence. In this same period, a number of taboos are enjoined to preclude that the behavior of the people would upset the unfolding of time and the seasons. Here again, the social order and the designs of nature are not viewed separately; the degradation of the former runs counter to the generally advantageous course of the latter. Following the sacrifice made before sowing, which consists in libations to the rice seeds and tools, the interdiction to work the next day on the *miir* is observed. The time for sowing is a collective decision made by the family and is quickly done by a team using digging sticks to make the seed holes. The men pace up and down the field, regularly driving the stick in the ground; the women follow, sowing a handful of seed in each hole. During the period when rice and other crops are sown, the *miir* house is built with an integrated loft. The craftsmanship of this bamboo house is remarkable; it is often more spacious, has a better layout and is maintained better than the village house. The field is protected by a rudimentary fence made of branches saved from the felling. Traps for small wild animals and enclosures and wickets for straying livestock are carefully deployed in the forest adjacent to the *miir* and around the house (for chickens and pigs).

A nutritious plant, especially the *vang* variety, is a sacred plant. A number of myths explain the circumstances in which it was given to men by the primordial god. Like the sowing, the heading period prior to the monsoon entails numerous rites and interdictions. It is not only a question of protecting the crops both materially and ritually. The rice ceremony is performed in two stages. The first, *peu pra pirr kaun* (ceremony for the young rice sprouts), occurs in the ninth month of the Tampuan year (seventh month in our solar calendar), when the paddy stalks have grown to a height of fifty centimeters. The stalk is then at full growth and the paddy begins to ripen, in particular the *vang*

variety. The plant is sprinkled (fertility rite) and its soul is retained by offering food gifts (chickens, rice beer, etc.) as well as by attaching unbleached cotton strings to the plants. The second stage, *peu pra pirr play*, (ceremony for the rice harvest) takes place just before the end of the harvest. When the paddy has reached maturity, but before the final harvesting, a few sheaves are cut to prepare *ambok* (roasted rice that is still green). Subsequent to threshing and pounding, the rice thereby gathered is offered to the ancestors at full moon. This ritual, which is described in other societies and found among both Laotians and Khmers, can be interpreted as a rite of abundance.

After further gathering by women, old men and children, the harvest properly speaking is undertaken, spread nevertheless over several months. The hulling of the paddy takes place at a very moderate pace, becoming more intense when the late varieties are harvested in October/November. Once the paddy has been harvested, separated, dried and stored in the field house, a closing ceremony ends the last day of work in the fields: a chicken is sacrificed, a jar of rice beer is opened and offerings are made to the soul of the paddy so that the harvest does not decay in the silos. With this celebration, the agricultural cycle has come to an end. The woman returns from time to time to the cleared ground to collect cotton and a few other plants, while the man goes back and forth transporting the daily ration of rice from the *miir* to the village. The harvest is thus left without supervision in the field, so inconceivable is the theft of rice. To steal someone else's harvest is held as the gravest of offenses and can entail ostracism, not to speak of the torment caused the culprit by the soul of the rice, for as the local proverb says, "he who steals harms himself".

Three successive years of rice cultivation on the same plot represents a minimum average in Chorn *phum*, six years at the most – although this is not very common. The length of time also depends on the slope, and steeply-inclined plots are sooner abandoned. In the surrounding villages, the periods of use of one and the same plot are identical. The abandonment of *oryza* cultivation does not however mean the abandonment of all other crops, especially with the adoption of plants for commercial purposes, some of which are long-standing, such as sesame and fruit trees (papaya, jackfruit, orange, lemon, guava), and others are more recent, such as cashew nut and pineapple. One thus observes among a number of peasants a change in their relation to the land, insofar as some *miir* are converted to small plantations that are to be seen in terms of long-term exploitation.

Of the cannibal order

The area cultivated by the Tampuan and the Proto-Indo-Chinese in Cambodia in general thus appears as land divided into fragmented plots, within which vast patches of forest are left as they are. It is a space animated and populated by a number of invisible beings whose existence conditions the relations that the society of the living main-

tain with nature. As long as forest rotation is not too short, there is little erosion because of the distribution of the cleared grounds. The very small cleared grounds, seemingly more precarious than the vast cultivated areas of a single tenant that are managed over a long succession of years, ensure a better chance of forest re-growth and therefore contribute to a better ecological stability of the natural ecosystem. Ground-clearing is integrated into a social context in which the symbolic and magico-religious representations lend it meaning and direct its use. It is accordingly impossible to separate the technical practices *stricto sensu* from the religious conceptions that encompass them. As has been seen, but without having described them in their richness and diversity, ritual ceremonies are present in nearly all activities during the agricultural cycle. The ground-clearers spend their life performing sacrifices and making offerings to the spirits, not only in the context of agricultural practices and foraging in the forest, but when health problems arise or natural catastrophes occur, or for important social events (birth, marriage, death). Material and immaterial considerations are an integral part of the daily and cyclic life of the Tampuan. But, rather than being evidence of the fear arising in a human society unable to understand its world in a "rational" manner, these considerations quite on the contrary lend meaning to life. The rituals signify to man that the place he occupies in his natural environment is not simply that of a predator or of someone whose mission is to master and conquer at any price the savage condition. His behavior towards nature and the beings dwelling in it (animals, spirits) is concretized through an exchange relation (at times conflicting), a compromise, before leading to a just balance, even should the latter only be theoretical.

For another thing, according to our own observations, the prescriptions of a magico-religious order tend to counterbalance human acts respective of the milieu, in certain cases to prevent uncontrolled human activity. Several sacred places inhabited by recognized spirits are also protected: the slopes and the summit of a hill, a distinctively formed forest, a bamboo stand, the surroundings of a water source and the banks of a water course, etc. Likewise, man has only the usufruct of the land he cultivates and the space where he builds his settlement. Consequently, he is attentive to "signs", mainly through dreams, when consulting a shaman, or at the occurrence of unusual events (epidemic, series of unexplained deaths in the village), that would indicate to him that the site is "hot", in other words, that the spirits of the forest intend to re-appropriate it and that it is time to settle elsewhere. In this context, the notions of property, hoarding and speculation are nearly inexistent; the only goods the families possess are the objects that can be taken with them (gongs, tools, clothing), although most personal belongings are destroyed or buried at death.

These socio-religious considerations do not imply that the relatively "sustainable" agricultural system of the Tampuan is one that functions relatively well insomuch as it functions out of sight, nor do they imply that ground-clearing techniques are exempt

from demographic pressures, that the introduction of new cash crops would not have had an impact, nor even that the re-growth cycle will or could be preserved. It is however cogent to recall that, following the example of other Proto-Indo-Chinese groups in Ratanakiri, they draw their agricultural insight from a tradition that rests on centuries of contacts and familiarization and on an empirical knowledge that is far from unfounded. Tradition, certainly; but that does not mean that it would be static and closed to all contributions from outside. Already changes are appearing in the scheduling of the crops, in the preponderance of some crops over others, especially with the introduction of a market economy in place of barter relations among the tribes, changes that favor a few marketable commodities (fruits, cereals, and tobacco) for which there is demand in the provincial capital of Ban Lung.

It goes without saying that accessibility to land and forest expressly requiring an extensive ground-clearing practice will not always be possible at the pace at which the annexations of forest territory by foreigners is increasing. The red soils of the Tampuan plateau attract the cupidity of the plains people and foreign investors. Indonesian, Japanese and Malaysian companies involved in forest exploitation consider settling there, and their presence is incompatible with the sustenance of indigenous societies in their traditional ecological niche. The environmental milieu of the central plateau cannot support at the same time a demographic burden and the intrusion of new cash crops without excessive deterioration. The fragility of the ground-clearing system stems from precisely the same conditions as its reproducibility. Viable or not, it is apparently doomed to undergo profound re-development and changes, not to say mutations. The example of the Kachac and of a few Jorai and Tampuan villages located in the riverside biotope of the Sesan north of the plateau shows that the indigenous populations are able to adapt themselves to new ecological circumstances if they have access to new material, biological and informational means (agricultural implements, herds, cowsheds, manure, marketing networks over which they have control, etc.). These villagers have chosen to cultivate rice without outside coercion, but they have systematically conserved small cleared grounds in the adjacent forests. This cleared ground is seen as a security field, while the rice field is considered as a source of productivity, of surplus income. At the same time, religious practices live on, modified and adapted to working in the plains, even though a weakening as regards the ritual codification of the agricultural cycle of the rice field is to be observed. One continues to protect the village from harmful influences; sacrificial ceremonies are still performed, adjusted to the new working conditions and the development of space. But no tradition is unwavering: a few Tampuan peasants and Kreung entrepreneurs who have transformed their cleared grounds to orchards (thus a fixed plantation) say they have definitively repelled the spirits of the place, or quite simply no longer believe in them. This shows that numerous individual and collective strategies enable individu-

als to negotiate certain socio-cultural constraints when circumstances demand. In other words, a society avails of a certain cultural flexibility and is in a position to produce new responses when the social context or, as in the case of Ratanakiri, the force relations among the various groups (migrants/locals) and the establishment of a new type of economy modify the rules of the game.

During the last five years, several aid agencies have focused on the indigenous populations of Ratanakiri. The Cambodian government had attempted a first series of interventions in the 1960s. These consisted in bringing the dispersed populations together on the riverside biotopes of the two rivers running from east to west in the region and in setting up a state plantation on the central plateau. American bombardments and the rise of the Khmer Rouge brought these processes to an abrupt end in the late 1960s. In 1994, four NGOs, two working in the health field, were present in Ratanakiri; another was devoted to rural development in underprivileged villages and the last, of religious persuasion, proselytized under cover of educational and dental care programs. The spatial field of investigation continued to be limited until humanitarian interest assumed significant, sometimes unclear, not to say disquieting proportions. Religious organizations with ambivalent motivations, and the European Community and the United Nations (UNDP – United Nations Development Programme) with predetermined ideologies, have been established while numerous other bodies like the World Bank foresee participating in the "re-development" of the province. Ratanakiri, land – or even "laboratory" – of experimentation and a stake for international aid that covers the largest to the smallest organizations, is in the process of becoming a microcosm reflecting the effort of globalization through an international order, which is apparently quite unmindful of the relation to otherness. For the time being, the precariousness of the means of communication and the absence of roads limit full-scale development activities to a few accessible villages (a little less than one fourth of the 274 counted villages) that are already in the process of acculturation. This is an accelerated acculturation inasmuch as fifteen years of Khmer Rouge terrorism and the Vietnamese invasion did not succeed in modifying in any lasting and intense way the prevalent forms of social and cultural organization.

In order to briefly illustrate a few interactions between outside intervening parties and the indigenous populations, we will take as example an organization that arrived in 1995 and that has sizeable material and financial means at its disposal. The objective of the aid agency, some employees of which are Khmers but the majority of the managers/intervening parties are foreigners, is to change the practices of environmental management that are seen as degrading and to create an awareness in the populations of different socio-political and ecological problems with which they are (or will be) confronted. To prevent the monopolization of their land, to preserve their culture while attempting to eliminate "what is not good", to improve the lot of women, to promote better health and better infrastructures in the region - such are the ambitions of an international institution anxious to collaborate in the matter of development with the provincial government. After having made an evaluation in the various zones of the province, a few pilot villages were chosen. The evaluation – intended to delineate the life of the villagers – was conducted by a team of fifteen persons who arrived in the hamlets in a Land Rover and with a battery of questionnaires, asking about the people's needs, their aspirations, their problems and frustrations. The highly conceptualized communication techniques are adopted in order to rapidly collect the most information possible and to bring about an interaction with the concerned villagers. The cultural factors are a concern for the developers in the sense that they are perceived as obstacles they must take into account in order to avoid being rejected by the populations. The cultural factor remains rather evasive; the outside intervening parties include all that constitutes folklore, or everything that remains inscrutable. However, culture is not only what is connected with the religious or the magical. It is also the manner in which kinship is constituted and how it organizes the social, political, religious and economic spheres, which among the Tampuan interact and do not constitute separate institutions as in Western societies. Cultural identity is nothing more than a way of conceiving of social relations and relations with the world in general, including with the environment.

The persons in charge of the organization are not concerned about the traditional knowledge pertaining to the use and development of nature (as a heritage as well as a dynamic component), nor about the internal workings of societies "to be developed". Time and means are always cited as limiting factors; focus is placed on what is to be done and on the means of implementing it to gain the support of the people. In other words, the objectives of the program are defined in advance and its establishment is mere strategy, without a genuine possibility of calling the initial ideology into question. The institutional logics of some aid organizations (financing, external dependence, political context, more or less prominent ideology) preclude an eventual re-orientation of the project's guidelines, even should the social realities be seen to differ from what had been imagined in the offices in the capital or at the headquarters of the organization.

Criticism of the approach that consists in taking what is good and eradicating the rest, in particular superstitions, beliefs and sacrifices to the gods, which are viewed as a squandering of resources that contributes to poverty, is also justified. For, changing one element in the system changes the whole system. We have seen how socio-religious factors cannot be set apart from cultivation practices, how the material and immaterial elements are inseparable. To eradicate religious ceremonies based on a certain perception of the environment, but which are judged to be costly from an economic point of view, means eliminating powerful moments that suspend the tedium of

daily life, breaking off a relation established between men, nature and the cosmos, dismantling what constitutes the keystone of social ties, destroying the main cultural reference points that lend village life meaning and cohesion.

In Ratanakiri, it is not the idea of wanting to introduce development that lends itself to criticism, but rather the manner in which development is thought, constructed and implemented. The deplorable health situation, the advent of market economy, the reinforcement of economic disparities, the crystallization of social tensions between the indigenous populations in the plains, the change in the relation to the land and to deforestation - these are the concrete problems that must be managed. It is true that the indigenous populations are not in a position to themselves control the situation, given the new force relations. Development should be understood as a misfortune with a potential efficacy, but again it is necessary to know about which efficacy one speaks and what social cost it entails. Furthermore, integrated or not, the activities must follow a certain order. It can be observed, for example, that the development of the communication network leads above all to facilitating the monopolization of land by the people from the plains and by forest enterprises, insomuch as there is no legislation pertaining to the citizenship of the tribal populations and land entitlement is not controlled. By the same token, the encouragement of a different form of environmental management, and consequently of new agricultural practices, must be accompanied by a regulation of commercial practices: one observes in the villages near the capital the development of a market economy that tends to render previously autonomous villages increasingly dependent on external fluctuations and pressures from "new" populations.

"They cannot remain as they are." The cannibal order is this will to introduce a new rationality into environmental management under cover of legitimacy and well-meaning compassion, interwoven with an implicit refusal to reflect on the question of otherness. In Ratanakiri, one witnesses a work of deconstruction and reconstruction that, on the basis of a claimed cultural void, intends to provide a new configuration appropriate to the society that is to be undermined. Negotiation is supposed to be established with certain leaders of the indigenous communities, who however are not always representative of, or in solidarity with, the average villager. These interlocutors are always chosen from among those who support the imposed norm; they most often perceive their participation in terms of personal social or material consequences (acquisition of power/prestige). The idea of development is itself under-developed, as Edgar Morin remarked, and it must be recognized that not everything is measured according to economic, social or health indicators. Having shared in the daily life of the Tampuan, having taken part in their joys and setbacks and in their ceremonies, and having seen how they for the most part testify to a true philosophy of nature, one can only deplore the emergence of notions of appropriation, competition and speculation,

even should they give a false appearance of individual security to some privileged persons, to the detriment of the notions of respect of the environment, of sharing, of the will to live together.

Discussion

The changes brought to agricultural practices will inevitably have future consequences for the socio-cultural and religious practices of the Proto-Indo-Chinese. Other solutions that are socially, culturally and economically less costly can also be envisaged to improve ground-clearing techniques and to mitigate the major constraints, namely, the extension of fields under cultivation and forest re-growth. It is in fact possible to reduce the periods of new forest growth by selecting for each ecological niche the most appropriate bushy, sarmentaceous or lianoid species that are likely to grow quickly without exhausting the soil's richness. Improving the choice of plots, fertilizing with natural manures, while favoring – but not excessively – animal husbandry and enhancing the selection and availability of rice varieties (although the Proto-Indo-Chinese have shown great capability in this domain) would be among the areas in which action can be taken. Numerous other possibilities intended to bring more stable production systems into play (for example, associating yearly cultivation, horticulture and arboriculture) could materialize, under the condition however that these alternatives would not be the result of a decision imposed by instances that unfortunately care little about respecting and understanding the way of life and the aspirations of the indigenous peoples. It would thus be desirable that a large number of arboricultural and replacement crop species and varieties adapted to the local soil conditions would be made available to the populations so that they can choose among them as they see fit and integrate them into their production systems.

As for development activities, the number of which continues to increase, it should be recognized that the participation of the populations in environmental policies, much flaunted in incantatory discourses and stressed in many development projects (such as the one we have examined), is often only a disguised pretence, proposed as an alternative to radical change quite simply, and leading most often to the same result. Similar objectives, but apparently different methods, means and rhetoric. It is not the idea of participation that is bad, but rather the insufficiency of the conditions for implementation and the non-integration of the means and the knowledge to be brought into play. The participation of the population is certainly less costly, but can also prove to be emasculating in practice: faced with the direct imposition of external ideas, one prefers a preliminary conditioning (through education, the creation of awareness, responsibility, etc., as if the Ratanakiri populations did not have a form of education, were not endowed with consciousness or did not have leaders). Genuine participation means on the contrary a *negotiation* between partners and not unilateral

discourse – as complaisant as that might be – held between teachers and pupils, whose acts, behaviors and ideas are castigated as soon as they depart from the logic of the actors of change. Too few of the projects conceived in the corridors of distant cities are prepared to re-model themselves after the ineptitude of the development activity has been realized. Although, it is known that project managers are also subject to logics and to constraints of a different order (the sponsors of funds, etc.), which are at times difficult to reconcile with what they discover – too late – in the field, and with what really awaits the populations.

In an editorial entitled "cultural exception and cultivation exception" [Semal 1995], one is reminded that cultural specificity would be coupled with an agricultural specificity that recognizes cultivators and rural functions in the diversity of their techniques, their markets and their know-how. The problem is raised in precisely these terms for the original inhabitants of Ratanakiri, who are in the process of becoming undesirable societies in their own territories, and whose lands are subject to many forms of cupidity. Because the future has not been considered in the attempt to safeguard and valorize what comprises the substance of the ground-clearers' lives, the latter are condemned to be assimilated with the mass of Cambodian peasants and to receive only the rogations of derisory substitutes offered to them in exchange for what can be taken away from them, in particular the magic and the memory of places, the mythic past and the exploits of their ancestors.

Notes

1 Paper initially presented at the round table, "Social and Environmental Dynamics", Regards/Bordeaux III, Bordeaux, September 1996.

2 Rice is dominant but co-exists with tobacco, cotton, indigo, maize, manioc, millet and sesame, garlic, several kinds of sweet potatoes, gourds, cucumbers, water melons, melons and other cucurbits, small aubergines, beans, peppers, sugar cane, castor oil plants, tomatoes, numerous *Zingiberaceae* including culinary ginger, yams, amaranth, taro, cashew nuts, lemon grass, sweet tamarind trees, several sorts of bananas and mangoes (notably the variety *cway cianti*), pineapples, grapefruit trees, kapok trees, papaya, orange trees, lemon trees, without counting the many local plants with domestic, artisanal, medical, ritual, dying, decorative, and aesthetic (flowers) uses and a few majestic bamboos in the shoals.

3 Fifteen varieties were counted among the Kraveth, while Jacqueline Matras [1983] listed some forty in her Brao village. Nevertheless, the Tampuan of Chorn *phum* only now have five varieties (three early and two late varieties), although they would be capable of naming three times as many. Each variety has its place on the freshly cleared ground according to the quality of the soils and their texture and, above all, the year when the plot was cultivated.

CHAPTER 5

Inter-ethnic Relationships and Specificity of Indigenous Populations in Cambodia

This paper is the result of fieldwork done in the provinces of Ratanakiri and Mondolkiri. Given the allotted time (three months field investigation), we stayed more than one month in the first region (Ratanakiri), less than one month in the second (Mondolkiri) as well as in the third (Stung Treng). Although the study is based primarily on data collected during that brief period of time, it goes without saying that our past experience in the villages of the province of Ratanakiri (more than eight months in 1994-1995) strengthens our more recent observations. Finally, an analysis of the available bibliographic references relating to the populations we visited was essential to broaden the space-time framework of our personal investigations.

General characteristics and ethno-linguistic classification

Among the various ethnic groups residing on Cambodian territory, the indigenous populations, as this word implies, account for the oldest inhabitants of the country. This generic and vague term is used to designate a mosaic of groups that are both heterogeneous - given some aspects of their material and social life - and alike, in the sense that most of them belong to the same cultural substratum, which is usually called Proto-Indo-Chinese civilization.[1] These populations traditionally clear ground, hunt, fish and gather. They devote themselves to a form of religion based on a cult of spirits, the culminating point of which - at least among the north-eastern inhabitants - is the buffalo sacrifice. Nevertheless, even though it is undeniable that certain groups have a common origin and differed later on, some other groups like the Samre and the Pear in western Cambodia undoubtedly have a number of physical and socio-cultural characteristics that attest to their originality compared with north-eastern groups. Conversely, some people whose geographic and linguistic stocks are clearly distinct, like the Jorai (Malayo-Polynesian) and the Tampuan (Môn-Khmer) of Ratanakiri, tend to draw near each other and intermarry in such an intense way - especially in Andoung Meas district - that focusing on their differences becomes superfluous and arbitrary.

Who are these various groups? How many are there? What are their names? It is possible to adopt an initial ethno-linguistic classification, but it is important to first mention that not only during the recent period, but also throughout their history, these populations have maintained close relations with one another as well as with the Khmers and other people in the plains. In that sense, as this work will further illustrate, one cannot approach the study of the Proto-Indo-Chinese groups in Cambodia without considering the more or less continuous relations within a wider social system that includes neighboring populations. In other words, each of the groups mentioned will be considered, not as an isolated entity, but as part of a whole in which each element interacts with the others.

According to the American classification, we may distinguish two linguistic families within the indigenous population: the Austro-Thais - or Malayan-Polynesians - and the Mon-Khmers. Among the former are found the Jorai in Ratanakiri (14,010 in 1994 according to our personal sources; 13,980 according to the provincial statistics) and a few Rhade mixed with the Phnong in Mondolkiri. Those two ethnic groups are linguistically related to the Cham subgroup, to which the Muslim Cham of Cambodia belong.

The Mon-Khmer family is widely preponderant and is subdivided into many groups, of which three are represented on Cambodian territory: the Bahnaric - itself divided into West Bahnaric, North Bahnaric, South Bahnaric -, the Pearic and the Katuic. The following table summarizes linguistic affiliations, localizations and the approximate total of individuals in each of the groups for each family. It should, however, be noted that ethnic classification can be misleading; this point will be further discussed in the text.

Table 1: Geo-linguistic classification of the main indigenous populations (N.=North, S.=South, E.=East, W.=West)

Ethnic group	Subgroup	Group	Family	Number (app.)	Localization
Jorai	Chamic	Austronesian	Austro-Thai	14,000	Ratanakiri
Rhade	Chamic	Austronesian	Austro-Thai	a dozen	Mondolkiri
Kachah	N. Bahnaric & Chamic	Bahnaric	Môn-Khmer	2,200	Ratanakiri
Tampuan	W. Bahnaric	Bahnaric	Môn-Khmer	18,000	Ratanakiri & Mondolkiri
Brao	W. Bahnaric	Bahnaric	Môn-Khmer	5,500	Ratanakiri & Stung Treng
Kreung (Brao)	W. Bahnaric	Bahnaric	Môn-Khmer	14,000	Ratanakiri
Kraveth (Brao)	W. Bahnaric	Bahnaric	Môn-Khmer	4,000	Ratanakiri (Veun Sai), Stung Treng (Siempang)
Lun(Brao)	W. Bahnaric	Bahnaric	Môn-Khmer	300	Ratanakiri (Ta Veng, Veun Sai), Stung Treng
Phnong (Biet)	S. Bahnaric	Bahnaric	Môn-Khmer	19,000	Mondolkiri, Stung Treng & Ratanakiri
Stieng	S. Bahnaric	Bahnaric	Môn-Khmer	3,300	Kratie (Snuol) & Mondolkiri (Keo Seyma)
Kraol	?	Bahnaric?	Môn-Khmer	1,960	Kratie & Mondolkiri (Koh Nyek)
Mel	?	Bahnaric?	Môn-Khmer	2,100	Kratie
Chong	(Pear of Thailand)	Pearic	Môn-Khmer	?	Pursat (and Koh Kong ?)
Samre	(Samre of Siem Reap)	Pearic	Môn-Khmer	?	Pursat and Koh Kong
Pear	(E. Pear, W. Pear)	Pearic	Môn-Khmer	1,440	Kompong Thom & the Cardamomes
Saoch	(Saoch)	Pearic	Môn-Khmer	~175 (35 fam.)	Kampot & the Cardamomes
Souy	?	?	Môn-Khmer	1,200	Kompong Speu (Oral)
Khmer Khe	Khmer	Khmer	Môn-Khmer	1,600	Stung Treng (Siempang)
Kuy	-	Katuic	Môn-Khmer	14,200	Preah Vihear, Kompong Thom, Stung Treng

Other groups identified in 1995 but for which there is no other available data: Prov (25,850) Robel (1,640), Thmaum (543), Loemoun (280), Kola (31), Kaning (150), Poang (260) and Rohong (in Keo Seyma, Mondolkiri)

Sources: personal investigations, provincial statistics and statistics of the Ministry of Interior (1995)

Distribution on the national level

The predominant settlement of the indigenous populations is located in the uplands in sparsely populated areas of the north and north-east: Kratie, Mondolkiri, Ratanakiri, Stung Treng, Preah Vihear, as well as in the massifs in Koh Kong and Pursat. Those

areas are on the borders of Vietnam, Laos and Thailand. This strategic location on the borders of the country draws the government's attention to those populations, all the more so since the territories of some groups (Jorai, Brao, Kraveth) are found in the adjoining countries. This delicate geographic situation confers on them both an undeniable importance and an increased vulnerability.

In contrast, the heartland and the Mekong banks are the domain of the Khmers. Nevertheless, although the so-called aborigines were defined in the past as ground-clearers and gatherers as opposed to the people in the plains (Laotians, Khmers, Chinese, Vietnamese), who practiced rice cultivation, fishing and mixed farming on the banks of the rivers, this differentiation tends - as we will see later – to become indistinct from the extension of rice fields, the adoption of new cultural practices and the recent population displacement. Moreover, many Khmers in the provinces in the north and north-east devote themselves to slash-and-burn agriculture. The fact that the Khmers and Laotians enter those remote areas increases inter-ethnic contacts and tends to change the lifestyle of the ground-clearers, just as some Khmers and Laotians know one or a few local languages and adopt some of the elements of the mountain dwellers' culture.

The geographic delimitation inherent in the restrictions of the study does not correspond to the lived spatial and social reality, inasmuch as economic, social, cultural and political relations with the neighboring countries are long-standing. It should be underscored in this respect that the territorial limits of some groups go beyond the Cambodian border: the Jorai, settled in Ratanakiri, and the Phnong, in Mondolkiri and in Kratie, may be found respectively in the provinces of Pleiku and Dalat in Vietnam; the Kuy, present in Preah Vihear and in Kompong Thom, are also in Thailand and in Laos, whereas the Brao and the Kraveth in Ratanakiri are related to those living in southern Laos. The border demarcation, imposed by the French in 1903, artificially divided those groups and restricted their movements to an area that was previously free of obstruction or administrative control. However, we should not conclude that intra- and inter-ethnic relations became simultaneously blurred from one country to another.

In other words, it should be recognized that if ethnic diversity persists despite incessant contacts, it must be comprehended within a wide area of cultural homogeneity, without taking into account any physical or national border. It is therefore important to keep in mind that, in order to identify a group, one has to consider it as part of a broader context, even though the study focuses on a deliberately restricted territory.

The groups face-to-face: from history to the myths of origin

In this chapter, we will only consider the historical period of the Sangkum, when the Cambodian government, through the impetus of King Sihanouk, began to take an interest in the new provinces of Mondolkiri and Ratanakiri and in the "development" of the indigenous populations. Beginning in that period, the destiny of the populations took

an entirely different turn with the policies of assimilation instituted by Sihanouk, then subsequently in the Khmer Rouge and post-Khmer Rouge periods. For this reason, we will further develop those events later in this work. The dynamics of population movements also makes it possible to show how the latter are articulated with one another, taking paths that sometimes converge, sometimes diverge, without ever being totally cut off from one another. Moreover, one of the most remarkable features in the world of thought of the indigenous peoples resides in the conjunction between their historical trajectories and the orientation of their myths, which explain in a similar perspective the common origins of Khmer and non-Khmer populations.

The first testimonies: the shock of an encounter or a rediscovery?

Travelers' accounts and historical documents have long attested to the presence of populations called “savage” or “primitive”. It is, however, not easy to retrace the evolution of the contacts between the plains people and the highland and mountain people, probably driven progressively back into the remote parts of the country from the time of the Funan Kingdom until the expansion of the Angkorian kingship. Nevertheless, among these ethnic groups, some communities lived in the plains, co-existed with the Khmers and had exchanges and contacts with them. The oldest information in which the aboriginal populations were seen as different from the Khmers concern those living in the regions around the big lake, the country's focal point around which Angkor spread. The Chinese ambassador, Zhou Daghan, who visited Cambodia in 1296 at the zenith of the kingdom, makes an uncomplimentary description of the indigenous populations. He mentions, on the one hand, those who lived as nomads in the forest and who had an extremely rudimentary material culture and, on the other hand, those who served the civilized Khmers but who were still treated as outcasts because of their “wild and bellicose nature". The chronicles of the ancient kings of Cambodia say nothing about the relations between the two peoples, whereas the annals refer to the role that the Pear, Samre and Kuy regularly played as mercenaries and warriors during the internecine quarrels between Cambodian princes until the end of the eighteenth century.

Until the reign of King Sihanouk, the non-Khmer ethnic groups represented a potential source of slaves sold either in a private capacity or for public works in the kingdom. The builders of Angkor temples widely called upon the more or less forced labor of these populations. They established a recruitment system that spread far across the present border of the country and included a significant part of Thailand, Laos and central Vietnam (former Champa). In fact, the slave trade goes back to an even more ancient time since it is mentioned in the Kram Teasa Kammaka [Soh 1991: 23]. In this Cambodian code, the legislators specify the statuses of various groups such as the Phnong, the Lao, the Rhade, the Kuy and the Pear. Their prices are mentioned as well as the conditions in which they are forced to work and the complex modalities by

which the nationality of the children of slaves is to be defined. As in ancient Rome, it was customary for wealthy families to keep slaves in their houses. The French Protectorate put an official end to those practices in 1897 with a decree, the enforcement of which was more or less respected during the first part of the twentieth century.

After the pillaging of Angkor by Siamese troops and its abandonment in the middle of the fifteenth century, we may wonder what became of the indigenous populations who had served as a source of slaves and monument builders. Some of them managed to escape back to the forests and mountains, but historians mainly accept that most of them served as a cheap labor force to extract and transport sandstone to Phnom Kulen (north of Angkor). Jean Boulbet's study on the situation of the Samre in the area of the massif seems to confirm this hypothesis [Boulbet 1974], while another author [Baradat 1942: 24] gathered testimonies from the same people that recalled its original homeland in the northern region of the Tonle Sap five centuries earlier.

In fact, there existed many forms of slavery with regard to the aboriginal groups [Forest 1979: 342]. First, some “maintained socio-economic relations with the Khmer monarchy that take the form of an annual tribute entailing specific products of these groups”. At the end of the nineteenth century, the Pear in the Kravanh Mountains supplied every year a levied quantity of cardamom, the Kuy in Phnom Dek gave iron and the Samre in the Angkor area supplied cotton. Apart from this allegiance, which ultimately only expressed the recognition of suzerainty as was practiced in the tradition of the Angkor kingdom towards every population it encompassed, apparently no other constraint was imposed. Second, there were “slaves for life, who in theory could pay a ransom for their liberty and be freed only by the will of the master". Jean Moura observes that some slaves belonged to families but that there were also royal slaves, mahouts and temple custodians [Moura 1883: I, 437]. The enslaved autochthons (the Pol) lived in remote places, confined to villages where they led an isolated existence, and this was so until a recent period. After the abolition of slavery, at end of the nineteenth century, the assimilation of the Chong and the Pear intensified. Nevertheless, the Samre, who lived in the Cardamom massif until the coming of the Khmer Rouge, continued the practice of ground-clearing and were more in a position to conserve their cultural identity, notwithstanding the persistence of contacts with the surrounding populations. Today, the participation in the construction of the Angkor monuments - whether as forced labor or not – is a matter of considerable importance for the populations of Ratanakiri and Mondolkiri:[2] a large number of villagers today assert that their ancestors, just as much as the ancestors of the Khmers, worked on the development of one of the most beautiful architectural achievements in the country, and thus lay claim not only to their contribution to the splendor of the ancient kingdom but, even more, to the paternity of Angkor.

The situation of the indigenous populations in the eastern part of the country is somewhat different, but this is less due to the geographic conditions than to the setbacks of history. The access to these regions is not, as one might think, particularly difficult because the valleys of the Sesan and Srae Pok (in the north-east), covered by light forests, are easy to penetrate and constitute a preferred route of access to the Annamese highlands. The Chams took that road after the fall of the Champa kingdom in the twelfth century and settled for some time near the present town of Veun Sai in Ratanakiri, as the archeological remnants of a citadel north of the river attest. Beginning in the seventeenth century, the Laotians also settled in successive waves along the Sekong, Sesan and Srae Pok Rivers and established regular contacts with the local populations. However, the villages were also sacked by human traffickers (Khmers and Laotians). By the end of the eighteenth century, the town of Siempang on the Sekong River (Stung Treng) had become the stronghold of a Khmer colony specializing in slave hunting. The flourishing mercantilism only deteriorated inter-tribal relations because some groups took part in attacks against their neighbors. Let us mention the Jorai and the Sedang in Vietnam, reputed to be fearsome warriors, arousing terror among the Annamese convoys daring to go near their territory, as well as among other communities, where they captured able-bodied persons to sell to traffickers. The few explorers at the beginning of this century recount that this endemic insecurity reigned in what was then called the *moi* (wild or savage) hinterland. Memories still linger: old Brao women whom we met in the district of Ta Veng in Ratanakiri had heard their parents say that they lived in villages fortified with sharp bamboo shafts to protect themselves against skirmishes and the prevailing climate of tension. The Phnong in Mondolkiri also still remember their tribulations with the Jorai and have incorporated those historical events in their mythology. One of their legends recounts why they do not eat wild chicken:

There was once a war between the Jorai, the Laotians and the Phnong. The first two organized expeditions to capture as many Phnong as they could in order to sell them. One day, as a surprise attack was being plotted, a wild chicken saw that the Lao and the Jorai were coming dangerously near the Phnong village. It rushed to warn the inhabitants and described the approach of the belligerents. The animal managed to convince the men of the imminent danger. The Phnong immediately took their crossbows to fight against the enemy, who had only swords. Having been warned in this way and armed themselves, the Phnong were victorious and could serenely return to their homes. Since that time, Phnong no longer eat wild chicken, in remembrance of the animal that saved their lives.

Nevertheless, we are far from considering slavery as the only motivation for the coming of the lowland people. Adventurers of all kinds came as well to try their fortune in the highlands. In fact, stories and rumors brought by the Khmers – in which imagination took precedence over reality – had abounded much earlier about these remote areas, and particularly about the north-east. The latter was wrongly seen as an El Dorado and it was said that gold and other precious minerals were to be found there in abundance and that in some places plants (trees, rare plants and tobaccos) grew in an extraordinary manner.[3] From the seventeenth century, travelers like the Dutchman G.V. Wuysthoff referred to economic activities between the cities along the Mekong and the inland people: the Khmers and Laotians of the present provinces of Stung Treng and Kratie bartered salt and iron for gold, wild animals, elephants' defenses, wax, gum and other valuable forest products.

Furthermore, political and religious relations between the three *sadet*, symbolic representatives of the Jorai power, and the Cambodian kings developed over many centuries. The oldest documents to mention this fact date from 1601, yet there are good reasons to believe that links were established far before that time. Every two or three years, delegations met in Sambok, to the north of Kratie, a place chosen because it was considered to be the door to the Kingdom of Cambodia. Exchanges and offerings were conducted (near temples built on that occasion at the meeting place) that, far from merely representing gifts limited to the occasion, were intended to seal a genuine symbolic and political alliance between the people from the highlands and the lowlands. As the Kingdom of Champa no longer played a role in the politico-socio-territorial organization of the Annam region (central mountains, littoral valley), it is easily understandable that the Khmers, on one side, and the Jorai - who controlled the valleys and the passes allowing access to the land of Annam -, on the other side, applied themselves to tightening their links. The Charter of Sambok [Leclère 1903: 377] testified in that sense to "reciprocal exchanges of diplomatic relations" [Dournes 1977: 100] and did not imply any unilateral allegiance. The potao sadet, who lived in the mountains of Vietnam, were therefore powerful interlocutors for the Khmer king; they were potential defenders of the borders and respectable allies. This exchange continued until the middle of the last century, a time when the king began to neglect sending a legation from Phnom Penh.

A legend narrated by the Kachah in the district of Veun Sai evokes the intellectual relations between this people and the king of Siam. It illustrates the deep and aesthetic nature on which a circumscribed community, facing a powerful invader, could pride itself:

There was a woman from Kachah who maintained relations with the Thai king residing in Bangkok. One day she appealed to him for the support of Thai persons well-read in the field of the Kachah literature. When she visited him, she brought the best things her people could offer. The first time, the king refused. The second time, he agreed on condition that the Kachah would bring him a white elephant. The woman brought the animal to the court, but died in meantime. Alas, her goal sadly failed. The king ordered that the corpse of the woman be brought back to her

native village and that a buffalo be sacrificed one month thence. After the death of the woman, her nephew - whose name was Plac Yin – succeeded her and became the chief of the Kachah. But he was particularly cruel: he beat up and killed men with impunity. The villagers left the village and stayed in Veun Sai until the French Protectorate, when a governor – by the name of Gnachathap - eventually vanquished and subjugated Plac Yin. The villagers were then able to return to their native village.
(Source: the chief of the Kachah village, district of Veun Sai, 16 October 1995)

With the arrival of the French in Cambodia, the autochthonous ethnic groups situated between the Vietnamese, on one side, and the Khmers and Thais, on the other, were subject to the sovereignty of various kingdom-states. They were claimed as vassals by neighbors who exacted rights over the hinterland, which they scarcely occupied. Nevertheless, neither the three countries that would later constitute Indochina, nor the colonizer, seem, at least initially, to have considered taking over this territory of high plateaus and low mountains, as if they realized that its neutrality and its mediation (at least because of its geographical situation) protected them from one another. However, during his missions, Colonel Cupet speaks of these zones as a "stronghold and refuge for insurrections to come" [Cupet 1900: III, 416]. The indigenous populations were then plunged into clashes with rival nations trying to usurp them. They were allocated different statutes of allegiance towards the central powers. As early as that period, a distinction was made [Cupet 1893: 173-256] among:

- "savages" subject to the Laotians: Brao and Tampuan (between Laos and Vietnam)
- "savages" subject to the Annamites: Rhade (Annamese chain)
- the Bahnar-Rongao-Sedang confederation (around the Kontum mission, Pleiku province)
- independent "savages": Phnong and Jorai (Vietnam and Cambodia).

The latter, subsequently joined by other ethnic groups such as the Stieng, gained a reputation as unsubdued ("insoumis"), bellicose people, who represented a menace to the civilizing mission undertaken by the French. In fact, the term "insoumis" was ascribed to peoples who refused to join forces with an external power and claimed their independence. From then on, the "pacification" campaigns, sometimes accompanied by exploratory missions (the Pavie mission led by Cupet, Henri Maître's travels, etc.), succeed one another in the most remote corners of this mountainous part of Indochina. Let us note that such a stigmatization of the mentality of people who, at the end of the day, only aspired to remain autonomous is to be found in the literature at the beginning of the century, in which the Jorai, and even more so, the Stieng were seen by novelists as tribes both fascinating and mysterious and as unsociable slave traders impossible to penetrate and understand [Malraux 1930].

In sum, the social representations of the autochthonous populations conveyed by the colonial administrators seem to repeat certain clichés maintained at that time by the lowland Khmers, sometimes more virulently and with the exception that "the links between the Khmers in the plains and their brothers in the mountains were always based on commercial and cultural exchanges and not on constraint" [Lafont 1966: 60]. Even though this assertion somewhat minimizes the impact of slavery, it is true that fifteen years after independence, the creation of the provinces of Ratanakiri and Mondolkiri did not provoke any radical and systematic change in the autonomy of village life, contrary to what took place in the case of the mountain dwellers in Vietnam. In comparison, the populations in the north-eastern provinces seem, until recent times, to have survived relatively well the fleeting contacts with Westerners, the brief Thai occupation and the "peaceful" co-existence with Khmers and Laotians. The first official attempts of assimilation under Sihanouk in the 1960s marked the beginning of a decisive turn regarding the future of local populations.

The myths of origin as a manifestation of inter-ethnic relations

Myths in Cambodia rarely mention the autochthonous populations. On the other hand, the myths of the autochthonous populations usually integrate Khmers, Laotians and other peoples from the lowland civilizations. A myth spread throughout South-East Asia and known by all the villagers in Ratanakiri and Mondolkiri evokes the phylogenetic uniqueness of all ethnic groups, including Westerners! It narrates the origin of languages and explains why the forest populations have a different knowledge and have lost the art of writing:

At the beginning of time, people all had the same parents. The people of the forests were the oldest. After them came the Khmers, the Laotians, the Vietnamese, the Chinese, the French, the Japanese, etc. One day, the father of the people fell very ill. As his death approached, he called all his children together and entered upon a long speech. All the brothers noted their father's advice on paper, except the oldest who wrote on a buffalo skin. As their father was speaking, the oldest ate some sugar cane. Hence, they were not able to receive all the teaching and to write it down. That is why their languages have poor vocabularies. As for the Chinese and the French, they were late. They arrived when the father was already very weak. The words they heard were thus very faint. That is why the Chinese and the French have faint sounds that are difficult to understand. Later on, a dog carried off the buffalo skin upon which the oldest had written the words of the father. That is why they do not write. The Chinese, who were late, developed writing similar to the tracks of chicken feet.
(Source: our Kachah guide, Pan Van Day, October 1995)

Other myths follow a similar line, focusing on the country and its inhabitants, and justify the origin of the names "*Khmer Loeu*" and "*Khmer Krom*":

Once upon a time, there was a tremendous fire on the earth. The water of the Mekong flowed and changed into a sea. Even the mountains were submerged. Only the two mountains in Vietnam could be seen: the first was called "Gaure" and the second "Lam Lung". The alluvial deposits of the Mekong changed into an island which took the name of "Koh Thlok". On this island was a queen, "Liv Yi". Koh Thlok would eventually become and be called Cambodia. This country was then populated with Khmers and Phnong. The Phnong occupied the highest part and that is why they were called the Khmer Loeu; whereas the Khmers lived along the river. But before the mountains loomed up, they were all the same.
(Source: chief of the Phnong village in the district of Pich Rodai, November 1995)

Then, another myth tells about the unique relationship of the ethnic groups and the sudden process of their differentiation:

A very long time ago, after a big fire, the earth was burnt. There remained only a woman, a dog and a chicken on a hill. The dog and the woman lived together and had children. But the dog killed all the children. Hence, the woman put her last surviving son on a raft on a big lake. The child grew and became an adult. This time, the dog was not able to kill his son. He said to him: "You must go eastwards; when you have found a girl, you must marry her". As for the mother, she went to the west and lived in the forest. Finally, the son met his mother. However, they did not recognize each other. They married and had many offspring. One day, the children asked their mother: "Who are we, mother?" and she answered: "You, you are Tampuan. You, you are Jorai. You, you are Brao. You, you are Kreung. You, you are Khmer. You, you are Lao, etc". Thus, the Tampuan is the oldest of all and the Kachah is the youngest.
(Source: an old Tampuan woman in Phum Lepo, Banlung district, Ratanakiri, 3 October 1995)

Myths are similar in form but not in content. Their language is different from common language and must be decoded. Moreover, their function consists less in giving a real account than in conveying a message, an idea that has significance, an import, in the culture of the people concerned. In this sense, the tale above and the one following express, among other things, but in their own ways, the ineluctable fact that one cannot go back in one's relations, in the lineage of one's ancestors, without finding sooner or later a common denominator. The history of the Tampuan and the Khmers, a short variant of which is given below, comments on separation as a fortuitous event caused by an animal and thus independently of the will of men,[4] who, we may imagine, did not ask more than to live together beyond any ethnic belonging.

In bygone days, the Tampuan and the Khmers lived together. One day, they wanted to change the place where they were settled. Everyone agreed on crossing the sea by means of a cotton string. The adults were the first to set off on the voyage. But, at midnight, a mouse cut the string and the others were not able to leave. Those who crossed the sea are the Khmers; those who unwillingly stayed behind are the Tampuan.
(Source: an old Tampuan woman in Phum Lepo, Banlung district, Ratanakiri, 3 October 1995)

Some myths of origin deal with the creation of the earth in primordial time when nothing existed, when the supreme god *(Brah)* created life, nature, trees, men - and the spirits that were meant to control human acts. In those long tales, which can last throughout the night, the narrator evokes the epics of the ancient heroes and the way society organized itself, gradually emerging from the original chaos. It is mainly on the occasion of a family or collective ceremony, taking advantage of a time when people meet again, such as during the dry season, that the old people repeat and transmit these stories in an atmosphere in which - with the help of the rice beer - the gesticulations, the rhythm and the tone used confer a dramatic, emotional and lively aspect on the tale. The long monologues can, at a certain point, broach the question of a shared identity, then of separation into several groups, the common ancestors of which are brothers or sisters.

But, myths are not frozen in the past. They may, over the course of time, integrate new elements that sometimes originate in historical events or, of course, sometimes result of contact with other populations. Everything transpires as if the proximity of the groups and their relations (economic, cultural, social, and political) should absolutely be justified in reference to the words of the old ones. In other words, they should be thinkable and "ratified" by words that cannot be questioned because every myth contains an element of the sacred and thus remains irrefutable.

Finally, other legends are concerned with rendering an established fact intelligible. This one explains why the Kachah language (mix of Austronesian and Austro-Thai) contains vocabulary from all the ethnic groups in Ratanakiri.

In the past, every ethnic community had to learn its language until it was mastered. But the Kachah, who was the youngest, was always late and was not able to speak his own language. So, he asked those who had heard the lessons what they had learned. When he met a Laotian, the latter taught him a few words. When he met a Jorai, the latter did the same. And so on, with a Tampuan and a Brao. That is why the Kasha language has a vocabulary drawn from all the languages spoken in Ratanakiri.
(Source: Pan Van Day, our Kachah guide, October 1995)

In this brief mythological journey, in which we have only borrowed extracts from longer narrations, the main idea to emerge is the entanglement of groups that have

become more or less arbitrarily distinct in circumstances imposed from the outside, that is, extraneous to the reflective will of the persons concerned. An unexpected act changes the nature of things, but later other events put the various communities in contact again. In this respect, myths reflect no more than an effort to classify things by disposing world and men in a way that is always open to modification. Although they still constitute the main vehicle for the transmission of knowledge in societies with an oral tradition in Ratanakiri and Mondolkiri, they do not constitute a history lesson in the strict sense, but rather a "lesson of things". And, it is interesting to note that their messages do not fundamentally disagree with the historical inscriptions and documents we will now present. It is permissible to draw parallels between the presumed authenticity of those documents and the symbolic meaning of the myths, but nothing more.

Formation and transformation of groups

The history of Cambodia is poor concerning the testimonies of migrations of the indigenous populations and the pertinent works in ethno-history have hardly been subjected to a genuine systematization. However, it is important to show that the actual constitution of the groups, their division and their distribution, is the result of long processes of migrations, interpenetrations and exchanges that sometimes resulted in the division of an original group into many subgroups, and sometimes in the reunification of ethnic entities that were distinct at a certain time in their history. F. Garnier, in the last century and, more recently, J. Dournes, advance the idea that if we go back to the beginning of the Christian era, the Cham were not more differentiated from the Austronesian Jorai than the Khmers were from the Kuy and other Austro-Asian Phnong before the Indianization of the country [Dournes 1977: 94]. This is also the well-argued thesis of Steinberg, who posits a similar origin for Khmers and highlanders [Steinberg 1957]. These theories of a common origin are reinforced by the epigraphic sources, archaeological data and the bas-reliefs of Angkor. Henri Mouhot observed the likeness between the sculpted figures that are presumed to be the Khmer people of those days and the Stieng type (faces, clothes, weapons, musical instruments), just as the heads of the Cham statuary in the great period of My Son look more like the Jorai than the Cham of today. Be that as it may, it is remarkable that such different sources - popular tradition and local mythology of the indigenous populations, on the one hand, historiography, on the other - converge and speak in favor of grouping the ethnic communities together, of a common affiliation, rather than perceiving them as irreducible entities. It would seem, however, that the Pear groups in the western part of the country are ascribed an external origin, probably *veddic* because of their similarity with the aborigines in Ceylon.

It must be said regarding the groups present in Ratanakiri and Mondolkiri that they do not constitute isolated systematically balanced and harmonious entities that form a consensus, notwithstanding the impression they give of forming a homogenous whole

with similar manners of expression, ranging from techniques to rites. In the few testimonies of the recent past (beginning in the eighteenth century), they are seen to come together and to separate under the effect of migrations, conquests, commerce, the search for new land and conflicts.

First, subsequent to the conflicts between the Laotians and the Khmers, which led to the surrender of the Attapeu region and the basins of the Sesan and the Sekong in the sixteenth century and to the first waves of settlement of the Laotians in the actual provinces of Stung Treng and Ratanakiri, and following the unceasing conflicts that persisted between these two kingdoms as well as with the kingdom of Siam, the north-eastern populations suffered the aftershocks of a situation disrupted by wars, in which anarchy and lack of control favored, as we have seen, the expansion of slavery. In fact, the slave trader incursions, according to H. Maître, would be the cause of the eastern retreat of the Brao [Maître 1912: 275], while the Jorai pushed the Halang living along the banks of the Sesan to the north, and the Tampuang westwards to the north of the Sesan. Afterwards, the Sedang drove the Brao to the west and south so as to occupy their territory in the Sekong basin. The latter, for the most part, continued to inhabit the forest and mountainous zones in the far north until the Sangkum period, while some of them began to dispute the Tampuan, who had recently come from the east, over the possession of the plateau of the interfluve with its rich basaltic soils.

The wars between various ethnic groups to bring back captives or to conquer new lands undeniably led to population movements [Bourotte 1955]. These wars do not, however, constitute the only motivation. Some groups like the Kaning and the Kayang, who lived in north-eastern Ratanakiri until the 1960s, returned to Laos or to Vietnam because of the difficult conditions imposed by their natural environment, the high prevalence of malaria in the mountains, as well as because of the weakening of their economic capacity. In fact, their previous presence in that zone would be explained by their commercial activities with the populations in Ratanakiri (Brao, Lun) and in southern Laos.[5]

It is impossible to know to how far back the division of the Brao group into subgroups of Kreung, Kraveth, Lun and the present Brao goes. But everything leads one to think that this differentiation took place once these groups had occupied different territories, for historical reasons unknown to us (demographic, ecological constraints)[6]. We now observe the converse movement: Brao and Kreung, who once co-existed in the same khum (Labang Moui and Labang Pi in Lumpath district, for example) tend in their discourses to reduce their differences and present themselves as a single ethnic group, notwithstanding variations among their dialects. On the other hand, the majority of Kraveth, perhaps because of their location, along with their history (repeated migrations) and their preference for a semi-nomadic lifestyle, display a manifest will to distinguish themselves socially and culturally from the other subgroups.

Nevertheless, the four communities mentioned above, the Brao, Kreung, Lun and Kraveth, have a common origin, belong to the same linguistic family, have an identical kinship system, the same form of social organization and occupy almost the same ecological niche. Although marriage between them is not prohibited (on the contrary), these populations exhibit empirically evident differences: one practices weaving, the other does not; one makes crossbows distinct from the other's, one group performs the annual ceremonies in a specific context, while the other proceeds differently, etc. These cultural "markers", which are explicitly stressed values, serve precisely as points of reference for these communities to distinguish themselves from each other, just as the commonly shared values – buffalo sacrifice, exchange of tobacco, gongs, consumption of rice beer for ritual purposes - express the same conception of the world, a certain "pan-ethnicity", as opposed to the people from the plains who have recently settled in the province. These markers defining the boundaries between groups are open to change in time and space and, in certain respects, testify to the will of groups facing each other to reinforce or, on the contrary, to mitigate their respective identities through empirically observable facts. For example, the tender melodies of the Tampuan accompanied by a stringed instrument and certain dances of the Jorai are increasingly taken up by neighboring groups, which in this way assert their will to add foreign elements to their tradition and to place themselves in a broader socio-cultural whole.

It is moreover meaningful to note that the Tampuan in Ratanakiri do not tend to consider themselves as a homogenous group, but as two or even three different entities: those who are settled in proximity of the Jorai around the banks of the Sesan are the ''high Tampuan'',[7] those who inhabit the center of the plateau that bears their name (Tampuan plateau) constitute the "low Tampuan", while those who are around the provincial capital of Ban Lung are simply the "city Tampuan". The second do not marry the first but, on the contrary, they seek alliances with the Kachah and above all with the Jorai, with whom they continue to share the same type of housing (the "long houses" that include an enlarged family), the same form of clan organization (each Jorai clan has its equivalent in the Tampuan clans) and the same natural ecosystem. As for the third, they are perceived by their homologues - but without any pejorative connotation - as "brothers of the Khmers". Geographic localization may thus prove to be a stronger factor of integration than membership in the same group.

In sum, the scant historical information available to us regarding the people of the forest in Cambodia already allows us to relativize the static view of these oral-tradition societies and to show that ethnic groups form and transform themselves, unite and break up in time and space. The populations in Ratanakiri illustrate this hypothesis in numerous ways. These modifications take place, according to the expression of F. Barth, "in the interaction of social groups, by mechanisms of exclusion and inclusion that establish the boundaries between the groups" [Barth 1969]. In other words, a more

dynamic view of ethnicity must be substituted for the snapshot image of different groups corresponding only to a situation perceived at a given moment in their history. Ethnicity is accordingly less a frozen complex of "cultural traits" transmitted just as they are from generation to generation than the result of the action and the interaction among various groups attempting to define themselves in comparison to the others in a social organization that is constantly renewed, and from which Khmer society is not exempt.

This is all the more so because, in a general way, each ethnic group whose line of descent is matrilineal and that has an alternate mode of residence (with a matrilocal tendency just after marriage) recruits persons from among other groups in geographic proximity to the purpose of marital alliances. In their turn, children born of these couples are able to go back to the families of the father or mother. For example, a Kachah man becomes Tampuan by alliance since he is integrated in the clan of his spouse, and his son may become Jorai or become Kachah again when he, in his turn, marries. There is thus a back-and-forth movement from one community to another over the course of generations. This permeability of groups through alliances is furthermore to be found between the Khmers/Laotians/Chinese and the autochthonous populations, with the difference that the indigenous people go and reside in greater numbers with the latter (in the provincial capital, etc.), whereas the converse occurs more rarely.

Before going further, it is necessary to assess what constitutes the physiognomy of the milieu into which the concerned populations become integrated. It is not a question of detecting a potential physical determinism, but of succinctly considering the manner in which concrete situations of inter-ethnic contacts are linked to precise socio-geographic and ecological contexts.

The contemporary morphological frameworks of contact

Everything that can condition the form and presence of contacts must be taken into consideration in the study of inter-ethnic relations. Localization, communication possibilities, the proportion and distribution of groups in a space they share or covet influence the quality of relations these groups maintain among themselves. By way of example, the chances are greater that two populations inhabiting the same ecological niche and competing for the acquisition of natural resources or practicing a similar economic activity will have exacerbated relations entailing potential sources of conflict, just as a disproportion between the demographic rates of two groups in close contact (geographic, social) necessarily influences the modalities of their socio-cultural relations.

Therefore, before examining collective representations, it appears necessary to identify the raw quantifiable and cartographic data in order to evaluate the ascendancy of these parameters and to see which of them have more or less impact on the reciprocal behaviors of populations.

Demographic context

a) About Cambodia

There are several major difficulties involved in determining even the approximate number of people belonging to the indigenous populations: there is no exhaustive national census; it is all but impossible to venture into unsafe and hardly accessible zones in the western part of the country; and, the extent of integration and mixing (intermarriage, interbreeding, etc.) of these communities. Because of these obstacles, the three estimates available as of the 1980s must be interpreted with precaution. The first, just after the Pol Pot period, is supplied by the Institute of National Statistics for Minorities: it records for the year 1981, 77,679 persons divided into nineteen groups (including an "others" category), that is, 1.18 percent of the total population of the country, estimated to be 6,565,518 inhabitants. The next evaluation of indigenous populations was not made until 1992, when the Department of Ethnic Minorities of the Ministry of Religious Affairs estimated 79,431 persons, classified this time into thirty-one groups, that is less than 0.9 percent of the nine million inhabitants supposed to populate the national territory. In 1995, according to the Ministry of Interior Affairs, the number of groups was reduced to sixteen and the number persons amounted to 73,738, or 0. 76 percent of the total Cambodian population.

Although the existence of certain ethnic groups would be recognized, their population is not counted, either because the location of the villagers is simply not known, or because the censuses were not properly conducted in the provinces. More than eleven groups were mentioned in 1992, without any numerical estimate. Even so, we may recall that, according to official statistics, only 10 percent of the ten million inhabitants would be non-Khmers. And, of that one million people, less than 100,000 are considered to be indigenous. Then again, we must recall that their geographic distribution is very unequal since more than two thirds of them are concentrated in Ratanakiri (more than 50,000) and Mondolkiri (more than 22,000).

While it is important to have an idea of the proportion these populations represent on a national scale and of their ethnic distribution, it is advisable not to "freeze" them by giving them a particular label, as is done in some classifications in cultural anthropology, which attempt to characterize groups according to a list of cultural traits differentiating them from one another. We will see that in Ratanakiri distinct identities remain in the absence of attested cultural traits and consequently that cultural uniformity may very well include many groups.

Conversely, the myths and statements we gathered show that the indigenous theory of diversity exists in spite of the relative cultural homogeneity any observer can notice when comparing the different autochthonous populations. In some cases, the issue of ethnic belonging is far more complex than what tables may show. Members of some

communities repudiate their previous identity and call themselves Khmers, such as the Kuy we met in southern Stung Treng.[8] As early as the 1930s, many families originating from "primitive" populations in the west (Pear, Samre, Chong, Saoch) denied their old names once in close contact with the Khmers [Baradat 1942: 2-10]. This phenomenon is reinforced by inter-group marriages; for instance, the few Phnong and Kuy in Stung Treng who marry and mix with Khmer and Laotian communities.

b) The state of population in the provinces of Mondolkiri and Ratanakiri

While keeping in mind these nuances, we will distinguish the lowland inhabitants in the plains from those who have lived for ages in the low plateaus and forests in Ratanakiri and Mondolkiri.

Among the original lowland inhabitants, the settlement of Laotians, first in Stung Treng and then in Ratanakiri, is the oldest, going back three centuries. They behaved less like conquerors or invaders than like colonizers settling in successive waves along the Mekong and its tributary the Sekong, to eventually reach Ratanakiri on the banks of the Sesan and the Srae Pok Rivers. If the first migrants were presumably adventurers/traders versed in slave trafficking and other negotiable goods (precious wood, gold, ivory, etc.), their successors were first and foremost peasants and fishermen seeking new arable land and rivers well-stocked with fish. Laotians promoted the development of irrigated rice cultivation, unknown in the province until then. During the past two centuries, they either funded their own villages, or invested in those of the tribal populations located on the fluvial basins.[9] Thus a mild interpenetration, intermingled with a tolerant religious proselytism, appeared, and many single men - who had initially come to work in the mines - married women of the neighboring ethnic groups, founded a lineage and created their own settlement, such as Phum Talao on the right bank of the upper Sesan. This co-existence/assimilation was in some regards reciprocal since a number of them learned the vernacular language (Brao, Tampuan, Jorai) and adopted a new way of life: participation in ritual ceremonies, learning of techniques for acquiring forest resources, etc. There are currently more than 12,000 in Stung Treng, 6,500 in Ratanakiri (mainly in Veun Sai and Lumpath), and less than 400 in Mondolkiri on the banks of the Srae Pok in Koh Nyek district.

Apart from the irregular arrival of a few Burmese traders in the glorious times of the Zircon mines in the Bar Kaev region, the settlement of Chinese traders is more recent and less scattered than Laotian settlement. The first wave of migrants left China at the beginning of the Cultural Revolution and formed a small community called Phum Thmei Chen in western Veun Sai. In spite of their small number - less than 200 – the latter controlled the major part of the trade with neighboring villages (Kraveth, Brao, Kreung and Kachah). A second wave, which continues to increase since the opening of an air route, settled in the provincial capital, attracted by the opening of the region, the

possibilities of creating a prosperous trade, in addition to land speculation. The Vietnamese, who are few in number, most often come from other provinces in Cambodia and live primarily in Banlung. They stay in a relatively closed community, living essentially on small trades, as artisans (masons, goldsmiths) or as wage-earners on rubber plantations (tappers, workers in the processing factory).

While the relation of the Khmers with Ratanakiri province is very old, their lasting settlement is more recent. In fact, rare are those who, like the Laotians, managed to adapt to the difficult living conditions and who demonstrated their intention to settle near the local populations. When the state-owned rubber plantation was created in the 1960s, a few poor families from the provinces of Takeo, Svay Rieng and Phnom Penh, at the incentive of the government but without great enthusiasm, agreed to migrate. The government relied heavily on them to "Khmerify" the autochthonous inhabitants. This tentative failed because of the lack of interest and the eternal fear of Cambodians "from down below" to live in the middle of the forest, a realm of spirits and of "primitives". Finally, only the western plain was colonized by the Khmers when, leaving the plantation in the late 1960s with the intention of returning to their region of origin, they discovered the vast agricultural possibilities of the boundless pediplain they crossed: the Kunmun district has since become a district colonized by the Khmers with a few Laotian enclaves. The migration process has however increased over the last few years in the entire province, be it for government jobs, trade/traffic with Vietnam or agriculture. Secular distrust is subsiding as a result of access facilities (by water, air and land), the creation of a well-provided hospital and the relative security prevailing in the area. At the end of 1995, they were about to reach the number of 10,000.

Table 2: Distribution of the Khmer/ Lao/Chinese/Vietnamese and indigenous populations

	Ratanakiri	Mondolkiri	Stung Treng
Indigenous populations	52,793	22,000	6,250
Lowland populations	16,806	2,400	65,500
Indigenous populations (%)	68,27%	89,10%	9,40%

Sources: official provincial data and personal investigation (1994-1995)

The absence of reliable demographic data, and thus the impossibility of elaborating a prospective analysis, represents a serious obstacle to the demographic knowledge of the Proto-Indo-Chinese. Unfortunately, many clichés influence projections of the growth rates of indigenous populations: one assumes, without verification, that the low density of these groups is temporary, that this is linked to deplorable living conditions and that, given hypothetical health and socio-economic improvements, the number of inhabitants will increase significantly. Therefore, they cannot continue to live and reproduce as they now do.

Censuses in Ratanakiri were seldom conducted in the past and their quality was erratic: in any case, they do not permit of a dynamic view of the population. Although comprehensive investigations tend to fill this lacuna [Diffloth 1989; Bourdier 1995a], numerous beliefs relating to the prodigious fertility of families confuse the issue. The image of the noble savage copulating cheerfully in a debauched ambiance continues to prevail. It goes without saying that this only reflects the fantasies of those who decree that it is so. No scientific investigation on mountainous populations in Laos, Cambodia, Vietnam or Thailand has yet identified the existence of such practices.[10] At the same time, the purpose is not to denigrate the essential role of the high birth rate as a contributing factor in the rapid growth of the population, but it must be seen in connection with the mortality rate and life expectancy if we wish to obtain a less fragmented view of the demographic situation. Attempted projections made by the UNTAC (United Nations Transitional Authority in Cambodia) for the province during the electoral period, start from vagueness and end in the most outlandish forecasts [Hughes 1993: 4]. Based on the principle that population data per district are incorrect or under-estimated, the data are exaggeratedly inflated with no regard for valid arguments. How is it possible, asks the author cited above, that there are only 9,368 Kreung in the whole province when more than half (5,431) are counted in O Chum district? It must however be recognized that each ethnic group has its territory and that such makeshift adjustments only obscure the numerical facts. It is even more dangerous to assume - according to what is said by a mysterious commentator in the same report - that most of the families begin to practice abortion only after the fifth child. From this idea, corroborated by his own partial and biased field observations ("I actually saw many children, boys and girls, in each village."), the analyst concludes once again that a five-child family is an acceptable reference for Ratanakiri province. Whence, a menacing demographic explosion. Nevertheless, none of the numerous studies on highland groups supports this point. On the contrary, a doctor who for many years studied the Pear and Samre had already indicated that "the average fertility of the savage people is inferior to that of the surrounding Cambodian populations" [Baradat 1942: 46]. The author mentions that families do not excessively aspire to numerous offspring and that traditional birth attendants have knowledge of abortive mixtures, the application of which is reserved for the second half of the gestation. He also wonders if fevers due to *plasmodium falsiparum* play a large part in the decrease in fertility, especially when they occur during the gestation period.

In the village where we lived, in 1994-95, a couple in which the wife is around fifty years of age has on average between two and four living children (sample of 147 families). Except for a high number of deaths, there does not seem to be any tendency to uncontrolled profusion. Among the Tampuan, an adoption system within the clan also tends to balance out the size of nuclear families (between those who have many children and

those who have none, for example). In the best cases, the will to give birth to more children than are wanted has to do with the risks of high mortality in the first years of life. Otherwise, the great majority of women we questioned are clearly aware of the additional work many young children represent, and the idea of numerous offspring seen as additional workers for agricultural or domestic activities is not put forward. Even if they do not constitute a generality, nuclear families with only two children are not exceptional. It is not our purpose to take these data as representative, but they show that we must be cautious when it comes to the idea of unbridled growth. Serious studies conducted on highland ethnic groups in northern Thailand counterbalance in the same way imaginary representations of a high and uncontrolled natural growth.[11]

Several observations that have been made about other regions in South-East Asia deserve attention and may apply here. First, it is impossible to extrapolate a high natural growth specific to a particular group in a locality, commune or district and to apply it to every population in Ratanakiri. Cultural attitudes play a significant role in the maintenance or irregularity of natural growth, but local variations in living conditions must also be considered. In the most remote places in the province, where no health service looks after the hyper-endemic aspect of malaria and respiratory diseases, a significant and lasting decrease in the mortality rate is unlikely in the near future. On the other hand, the natural growth rate of recently settled Khmer and Chinese populations is certainly not below that of the indigenous populations. The family size of old or recent migrants is often above six children. This is reinforced by a certain stability and a relative security because of a clearly lower infant mortality, which is due to the fact that health infrastructures in the capital are more easily accessible to the Khmers and Chinese than to the Proto-Indo-Chinese.

From these brief reflections it follows that there is no solid basis for the projected demographic explosion in Ratanakiri. Should there be a risk of intensification of the population, it would be linked rather with government policies that envisage the arrival of several thousand Khmer families, but not with the "sexual dynamism" of aboriginal populations. As for the health pretext, it is still far from changing the balance between births and deaths. It goes without saying that the same reasoning applies for the growth rate of indigenous populations in Mondolkiri, Kratie, etc.

Nevertheless, even though ratios among the various groups are indisputably in favor of indigenous groups, who represent more than 80% of the whole population of the two provinces, the differences between the growth rates of these populations will progressively decrease because of the impending Khmer migrations. Consequently, there is a high risk that the evolution of the existing economic and social forces will change to the detriment of indigenous groups, if the latter are not accorded the means to decide about and participate in policies for the development and protection of the territory that has always been theirs. We will return to this point subsequently.

Evolution of the geographic and ecological settlement of populations

Mondolkiri is the largest province, with a density of less than two inhabitants per square kilometer, and Ratanakiri is the third in area, with more than 4.6 inhabitants per square kilometer.[12] The general configuration of the environment is simple:

- in Ratanakiri, a low, unvarying, slightly undulating, vast sedimentary plain covered by sparsely wooded forests and savannah with, in the centre, a basaltic plateau culminating at less than 500m, with rich red soils, a dense forest and scattered secondary formations testifying to the regeneration of old ground-clearing and other clearings carried out by man [Bourdier 1995c]
- in Mondolkiri, an immense forested plain extending as far as Kratie, separated from Vietnam by a river to the south and by small mountains to the east, which announce the foothills of the Dalat region. To the south, around the capital Sen Monorom, a landscape - unusual for Cambodia - of round hills covered with continuous grass has the appearance of a shrubby savannah with sparse trees curled up because of cold and strong winds that blow in winter. The vegetation terracing is exemplary, with a dense forest in the thalwegs that progressively disappears as one leaves the narrow valleys. It is in this woody and enclosed ecosystem that the Phnong in O'Reang district and the villages around Sen Monorom live and practice ground-clearing.

In Ratanakiri, zones of dense forests and, more recently, roadsides constitute the most common type of localization.[13] Dwellings are grouped together in the villages, but they are still relatively scattered. Those in Mondolkiri (O'Reang, Pich Rodai districts) are even more spread out, except in the *khum* (such as that in Busra in Pich Rodai), where villages were established around a vast rice-field plain. In other places, the persistence of the *krom sameakki* system in this province contributes to the spatial scattering of residential units since a *phum* is divided into two to four krom that can be separated by many kilometers.

However, even though dwellings are theoretically grouped together, families spread out in their respective cleared grounds and live in their house/loft in the middle of their *chamcar* during the major part of the agriculture cycle (that is, for two thirds of the year). Those whose fields are close to the village go back from time to time to spend one or more nights in the village, depending on the intensity of the work to be done. Once the rice has been harvested (in early December), all the inhabitants will systematically return to their village houses.

None of the vernacular languages has a word to designate the region, or to mark out the territory inhabited by a particular ethnic group.[14] For each of them, the space of daily life focuses on the social environment of the *phum*, within which fields are regularly displaced and from which the resources necessary for daily subsistence are taken. In sum, a social environment includes the settlement, water points, the *chamcar* (or *miir*) and the forest, including all the supernatural beings populating this space.

The average size of a village is 274 inhabitants, with a slight excess of women (139 versus 135). It is however common to find *phum* of more than 450 inhabitants, with a maximum of 841 souls in a village in southern Bar Kaev: an enormous number for a ground-clearer population. Data in Mondolkiri are not available, but it is clear that the average size of villages is definitely smaller.

Table 3: Size of villages in Ratanakiri

less than 100 inhab.	100 to 200 inhab.	200 to 300 inhab.	300 to 400 inhab.	+ 400 inhab.
28	84	70	34	29

Source: personal investigations (1994). Urban agglomeration and four villages in the Labansiek rubber plantation are not included.

The classic "round" or "square" configuration of settlement tends to change in villages near the provincial capital and the neighboring biotope. Settlements are spreading along main roads in both provinces. This change is linked with a government initiative, the aim of which is, from an agricultural perspective, to encourage populations to exploit the river banks (something they never do) and to practice mixed farming for subsistence around houses. This new arrangement, based on the Khmer model, is not without consequences because it introduces both a complete sedentary lifestyle (although without succeeding totally) and a change in the conception of relations between social and natural environment. In fact, the village in its traditional form reflects the world order upon which reposes not only the socio-territorial organization of houses, but also the distribution of freshly cleared grounds in the social environment of the village .[15]

Until a recently, lowland people who migrated to both provinces did not occupy the same ecological niches as indigenous populations. Laotians, Khmers and Chinese settled along river banks and in the Kunmun valley advantageous for rice fields. As for the ground-clearers, they have always preferred more remote places, woody and hilly areas where it is possible to practice slash-and-burn agriculture. A relative balance remains, inasmuch as lowland and forest people did not enter into competition for the allocation of natural resources. A first change occurred in the 1960s with policies of spatial redeployment of the populations in the far north (Brao, Kraveth) to the Sesan River. The effects were less significant in Mondolkiri, both because of the low population density and difficulties of access to the region: the center of the northern district of Koh Nyek was selected as a new agricultural area because of its wide plains, ideal for promoting rice cultivation, and a few Khmer families were settled there "to set an example". In 1956, 250 Cambodian soldiers were mobilized to work in Sen Monorom and in O'Reang to plant pine trees (to be used as wood for building). In Ratanakiri, a rubber plantation was created in the 1960s in Labansiek, near the present provincial capital:

villages were displaced and people from the plateau were "solicited" to become workers on the plantation. The discontent of those compelled to leave because they refused to submit to the program was combined with the unhappiness of those who had been monopolized everywhere in the province. They very soon became aware of the drawbacks of a job with fixed hours and regulations that were scarcely compatible with their concept of a man free from any centralized power.[16] Troubles erupted and Tampuan and Jorai opposed the government army, which severely repressed the rebellion.

The government foresees the settlement of at least 20,000 Khmer peasants in Ratanakiri in the decade to come. We would be justified in asking to which extent this foreign pressure, in addition to the spontaneous flux of Chinese and Sino-Cambodians migrant investors, will give rise to territorial encroachment and disrupt the management of natural resources. Admittedly, space is not lacking, but it is crucial to know which land will belong to whom. In other words, do indigenous populations not risk being dispossessed of their adopted territory? Traditional management, dictated by undeniable knowledge of local ecosystems, is essentially based on a judicious distribution of villages, each having its own space in which all familial cleared grounds are apportioned. The system of slash-and-burn agriculture can no longer be viable if this vernacular division of space is upset, if social environments in each village are shrunk. There is the risk that the concentration of cultivated areas, implying a reduction in the forest re-growth period, will be the immediate consequence of the nucleation of settlement zones and of their forced and definitive adoption of a sedentary lifestyle. Techniques for using nature are adapted to the characteristics of a specific biotope and there is a risk that this will no longer be so when population conditions and possibilities of periodic shifting change. Populations, and particularly women, risk losing control of their means of production and increasing their dependency on the foreign market [Bourdier 1995]. As a sign of this evolution, which is likely to be adverse for the indigenous population, it is significant to observe the unscrupulous strategies of private investors out to grab patches of land traditionally used and maintained by the autochthonous people, not to mention the designs of Asian foreign companies desirous of the rich basalt lands.

The ancestral balance between social ecosystems and ground-clearing social ecosystems is thus seriously threatened. Moreover, the peaceful co-existence of indigenous and non-indigenous populations seemed until now to rely more on their respective wills to settle - some preferring the heart of the forest, and others, plain areas and fluvial basins -, rather than on their propensity to live together, even if conflicts would not be apparent. For now, places of interpenetration are rare and limited primarily to main roads,[17] where Khmers and Laotians set up small businesses or exploit a plot of land. Nevertheless a certain awareness is emerging here and there in highland villages through some individuals who are determined to keep their land and are keen on asserting their rights. It is only the beginning of a change of behavior which has not yet

the scope of a generalized social mobilization, but which may soon modify the data pertaining to the inter-ethnic situation.

Continuity and change of the main identity symbols

Contacts between Proto-Indo-Chinese and lowland people are destined to intensify in the years to come. We could evoke, not without justification, the shock ensuing of the encounter of cultures, but it appears more judicious, in the framework of a study on inter-ethnic relations, to examine the context in which this encounter takes place. Our purpose is less to oppose ethnic groups than to see under which conditions their borders are established. To do so, we will first identify the most significant cultural markers for indigenous groups. We will not pay particular attention to notions of custom and traditional law, inasmuch as Joanna White, in the same interdisciplinary project, has accurately developed this aspect in her study.

A sedentary life-style within a delimited territory

Traditional socio-territorial organization has often been wrongly interpreted in that forest people were considered as insatiable nomads who must be forcibly settled. In reality, each village possesses a territory with tacitly known boundaries and on which each nuclear family clears a patch of forest for its agricultural needs. Among the Tampuan, the cleared field *(miir)* is enlarged every one or two years and some parts of the original patch are abandoned. After three to five years, depending on the quality of the land, the family leaves the site for good and seeks another patch of land to clear. Previously, the whole village moved every ten or fifteen years when the cultivated lands had become too distant from the settlement. This change could take place either within or outside the social environment; in the latter case, a new territory is physically and symbolically circumscribed with the tacit agreement of the neighboring villages. Although these shifts have today become more infrequent due to state-imposed constraints, one often observes collective shifting in the wake of a lethal epidemic disease or a number of unexplained deaths in a single family. This occurred in 1993 among the Tampuan in Phum Kao, Bar Kaev district: after forty or so deaths (children, adults, and old people) during an agricultural season, the council of elders decided, after sacrifices intended to appease village and forest spirits had failed, to transfer the village to its old site and to give it back its original name, Shorok Paley. In fact, a series of deaths is interpreted as a manifestation of local spirits who no longer want human beings to occupy their territory.[18] Metaphoric expressions such as “hot forest” or forest “burning without fire” indicate the necessity for humans to leave as soon as possible a place haunted by spirits who are little inclined to co-exist with human society.

Such moves do not constitute an exception; nevertheless, they do not justify the appellation “nomad", no more than would a Khmer or Chinese family that moves from one house to another or from one village to another be viewed as an itinerant group. Villagers' migrations over long distances took place in the past as a result of exceptional occurrences (wars, political problems, search for new territories subsequent to demographic pressure) and to a lesser extent today (subsequent to a series of deaths, conflicts leading to a division of the *phum*, government decision), but they do not constitute a trait exclusively inherent to indigenous ideas.[19]

In fact, “itinerant” slash-and-burn cultivation, as practiced in Ratanakiri, is a fixed practice because families are quite aware of an eventual return to a cleared land that has been abandoned.[20] It is therefore a limited mobility within a definite space, subject to the approbation of forest spirits and the council of elders (constituted of “respectable men” without distinction of clan or lineage). Ground-clearing implies knowledge of managing forest stock in order to preserve its agricultural potential and its regenerative vigor within a clearly determined spatial frame.

We have already drawn attention in another work to the strong links between villagers' socio-spatial organization and the territorial distribution of cleared grounds in the social environment (see chapter one). The first is a reference for the second [Bourdier 1995b]. For the system to function in a coherent manner, that is, for the projection of the social order in the process of the domestication of nature to be realized, a relative permanence of the cluster area is essential; otherwise, the epicenter, starting from which not only the village territory - with its relations, discord and family histories – is perceived, but also the organization of the landscape and the cosmos, would disappear. In this sense, unlike real bands of nomads,[21] ethnic groups in Ratanakiri and Mondolkiri tend rather to adopt a sedentary lifestyle. They completely settled in some places, inasmuch as their villages have been established for more than twenty years and they intend to remain.[22] Note, however, that the Kraol - now settled in Kratie and Mondolkiri - were horticulturists/nomads until the French forced them, at the beginning of the century, to accept white civilization.[23]

Thus, modalities of land exploitation and their periodicities of use cannot be understood in terms of instability or mobility of settlement. This is a mistake made by the authorities in the 1960s, when they wanted to establish sedentary cultivation (creation of immersed or irrigated rice fields) and thus direct villagers towards new ways of occupying space, simply by forcing populations in Ta Veng district to settle for good in “repopulation zones" (i.e., river banks). However, the concerned Brao and Kreung villages, very little inclined to riverbank cultivation, continued to clear land. But, as their villages were concentrated and localized in single file according to the Khmer conception, a more intense deforestation ensued in the adjoining forest back-zone. Although we cannot deny the ultimate responsibility of local population for this deforestation, it is nevertheless the consequence of a thoughtless government initiative.

Divinities, ancestors and relatives as fundamental points of reference for Proto-Indo-Chinese identity

Religious practices of Proto-Indo-Chinese have been the object of minute descriptions regarding the Brao [Matras 1983], the Jorai in Vietnam and many ethnic groups in former Indo-China (see in particular, Condominas 1957 and 1965). Those practices represent an undeniable common background, irrespective of minor nuances that can be found here and there, from one group to another. A similar religion with a superior god, based on ancestors and the worship of spirits, tainted with animism,[24] is thus to be found in every ethnic group in Ratanakiri and Mondolkiri.

The sacred is omnipresent in the life of forest peoples. Most of their actions - from house-building, the opening of the hunt and marriages, etc. to the preparation of a new field -, and any sudden appearance of misfortune or disease, involves a complex cosmology that links humans and transcending powers. It is not necessarily a question of submission to or apprehension of a world, the mechanisms of which cannot be grasped, but rather of the will to establish a deep relationship with a natural environment with which society feels itself to be interdependent. There are ways to enter into communication with supernatural beings: they may be the prerogative of a few specialized individuals (soothsayers, shamans, healers, etc.), but most of the time it is through dreams that a family receives messages from the other world, and it is through propitiatory ceremonies (sacrifices of domestic animals) that the family iterates its devotion either to ancestors and place spirits, or directly to the supreme god as creator.

It is also through religion that group identity is manifested and reinforced. In ground-clearing societies in which village life is reduced to a very few months, religious ceremonies provide numerous occasions upon which to meet. We will only draw attention to the main ceremonies here.

Every year, people in the *phum* organize themselves, collect money and get together for the big ceremony that is held for several days during the dry season. During the festivities, a buffalo is traditionally offered to village divinities and an impressive quantity of rice beer is drunk.[25] Such a festival - in the original sense of the term, the process and interpretation of which have been wonderfully described by Roger Callois - corresponds to a neuralgic moment for the future, as all that happens during that time is thought to influence the period to come.[26] Buffalo sacrifice is the sacrifice par excellence, but another domestic animal may be substituted for it (cow, pig, chicken).[27] This ceremony represents the zenith of religious life and is an important time for villagers: myths are recited and society regenerates itself while social links are reaffirmed (system of invitation, sharing, exchange between various clans, between family in-laws, etc.). But there are also less grand ceremonies, on the scale of the lineage (Tampuan, Jorai) or of the enlarged or even nuclear family. Among the Phnong, the sacrifice of a buffalo is made according to the quantity of rice harvested, and below a minimum average of one hundred *sâ* (a *sâ* corresponds to a big basket) per family, no bovid is killed. Let us note that the sacrifice, an essential act in Proto-Indo-Chinese religious life, takes all its meaning from a gift and counter-gift logic: to offer so as to give back part of what has been taken from the earth, and to offer so as to subsequently receive in greater amounts.

It is through religious cosmology that myth allows humans to retrace their history and lineage from the creation of men by the supreme divinity (*Yang* for Jorai people, *Brah* for Kachah and Brao people, etc.) to their current descendants. Kinship provides individuals with a reference in society and in space, but also in time. Some Phnong can recite genealogies that go back more than twenty generations! Knowing one's lineage is a means of remembering one's origins and simultaneously enables one to know with whom and for how long one shares a common ancestor.

Parallel to this line of descent in time is an imaginary kinship (using words such as “big brother", “uncle", etc.) that aims to integrate symbolically the one who would normally be “the other". Because, ultimately, a true long-lasting relationship with others is inconceivable if it is not concretized, at least in language, by a social relationship and, in the best of cases, by an alliance between the two “persons sworn-to-loyalty" (“fidéjurés” in French anthropological terminology; Condominas 1957).

Any careful observer of village life can only acknowledge the importance given to kinship relations. Kinship is not only the base of the social and territorial organization of ground-clearing populations, but it encompasses all economic, political, religious and cultural sectors of activity in society. Roles and statutes of individuals are defined according to the place they occupy in the family (youngest/oldest, affinity/consanguinity, etc.), of course with possibilities of innovation according to individuals' personalities. Among ethnic groups in Ratanakiri and Mondolkiri, kinship is classificatory, that is, all members of the same generation are brothers and sisters. Prescriptions relating to marriage are extremely codified,[28] without for all that excluding the opinions and preferences of the involved parties. In a social milieu in which everything is ruled by such a parental “despotism", any person who is not included in the kinship relations and who does not subscribe to the constraints these relations impose on individuals is viewed as a stranger. Not to adhere to the kinship system and its inherent constraints means in one way or another not to submit to the village law on which is based the edifice of Proto-Indo-Chinese civilization.

The earth: a respected source of life

The link between humans and the earth and the relation between the earth and spirits are among the most significant socio-cultural attributes among the Proto-Indo-Chinese. These values continue to have an essential importance. The fundamental idea is that the earth does not belong to humans: the latter may exploit it for a limited period and each

family of ground-clearers always keeps in mind that the clearing it makes in the forest is provisional and that it will in future return to its natural state. That is the basic principle of professional ground-clearing societies. Before each ground-clearing, it is proper to ask permission of the spirits of the forest. A certain number of ritual and divinatory processes – in which dreams, prayers and sacrifices play a prominent role - are employed in order to ascertain the "opinion" of supernatural beings who are the guardians of earth, forest, mountains and water points. Such prolegomena to the development of cultivated space persist in populations who begin to practice irrigated rice-growing: in 1995, Kachah in Veun Sai considered clearing bamboo stands, but waited for the propitious moment to supplicate the spirits of the place. A story describes the manner in which the supreme creator watches over humans so that they respect what comes from him, and how he delegates his power to spirits:

"First, God created men-gods. Ya Paum (mother savannah) and Vokatai (her son) created the earth, water, plants and animals. Everything was created by the divinity. God gave 'prateal' to humans so that they might nourish themselves and attain knowledge… Man can create everything that is necessary for life by using what comes from God – an aeroplane, for example… The spirits of water, of the earth, of the mountain and of all the rest are God's creations. They are here to protect and watch over the various elements of our Earth. Nevertheless, some spirits disapprove of men, do not like them, especially when they "pollute" (destroy) nature… The spirits of the water, of the earth, etc., cannot harm the earth, water, nature. They cannot create these elements either. They only govern and protect the world… That is why, before cutting a tree when the ground is to be cleared, it is necessary to ask permission of the spirits."
(Phum Ka'pieh, Veun Sai, 15 October 1995)

For Phnong in Mondolkiri, libations are offered annually to every water source and some, particularly renowned for their healing power (the one in Phum Kang Thé, for example), have myths explaining their esoteric character and specifying who, how, and under what conditions humans may use them. In Ratanakiri, several places (for instance, hills, rocky escarpments, sandbars on the Sesan) inhabited by spirits are sacred: it is forbidden to cut wood, to hunt or to fish in such precincts. Moreover, patches of land that are the exclusive domain of powerful spirits benefit from complete protection and are not subject to any human activity. They are mainly found around villages, lakes or mountains and along small rivers. These traditional systems of nature protection thus moderate any untimely and uncontrolled activity by the villagers. As a result, aboriginal populations perceive the environment, not as something to master, dominate or vanquish, but as a living entity deserving of respect and with which they have to compromise. It should be mentioned that certain indigenous notions can be found in the background of any rural Khmer society in which sacred places exempt

from any human activity are to be found, as well as a plethora of cults associated with cultural practices [Porée-Maspéro 1962]. In Ratanakiri, myths tell of the origin of certain sites and explain how they acquired their sacred character, for example, the legend of Lake Roloem recounted by the Lun in Ta Veng district in northern Ratanakiri.

There were once two brothers who were orphans. The season when one began cutting wood to prepare the ground had come. The two brothers asked their maternal uncle to make a machete for them. But the latter was quite drunk and not in any condition to fulfill their request. The two brothers became angry and decided to take revenge and cause trouble for their uncle. To this purpose, they took "Trang", the eel, black ants and red ants as well as rattan shoots. They boiled everything in a bamboo and poured the concoction in a drum. One day, the maternal uncle was performing a ceremony. He started to beat the aforementioned drum. Suddenly, lightning struck and burnt down his house. This spot then changed into a lake, for which reason it was called Roloem, in memory of his name. All human wickedness was prohibited on that site.
(Recounted by a man from Phum Ta Nyay, 15 October 1995)

Phenomena occurring in nature are closely linked to the actions of men and develop according to the quality of the relations maintained in human society. Therefore, in indigenous logic, rains, dryness and natural calamities are linked to human deeds, and man thus participates in the perpetuation of observable phenomena in nature.[29] Not only is it necessary to first receive the consent of the spirits, but it is also necessary afterwards to respect the place according to the limits instituted by society. Therefore, some behavior is unacceptable, not only in the *chamcar*, but also in the forest (for example, stomping the ground, making noise for no reason), along rivers and water sources. Furthermore, homage must be regularly paid to the spirits who deign to grant men the privilege to exploit the land, and one must respect what belongs to others. That is why theft is one of the most serious offences in Proto-Indo-Chinese societies; it is strongly censured by systems of prohibitive fines[30] decided by the traditional council of elders responsible for enforcing extremely complex customary rights. We must add to this the belief in the "spirit of the stolen thing": a Tampuan explained that someone who takes something that does not belong to him incurs the wrath of the "spirit (or "soul", in the case of rice) of the stolen thing". In other words, the person who steals is responsible for his own destiny and for that of his family and risks calling forth - for himself and his relatives - disease and misfortune.

It is advisable not to generalize local perceptions because modifications occur according to socio-cultural contexts and contacts with the outside world. The evangelization of some Phnong, Tampuan and Kreung villages contributes irremediably to the abandonment of traditional systems for the protection of nature. Christian Phnong in Mondolkiri (about 700), who converted in the 1970s after their escape to Vietnam and

then following their return to Cambodia in the 1980s, evince an entirely different perception of the natural environment. Since then, the latter is perceived as a sterilized space that has lost its sacred aura, devoid of any interaction with spirits in whom the Christian Phnong no longer believe. Between the districts of Sre Ambom and Krang Teh, conflicts arose between Catholics and adepts of the Proto-Indo-Chinese religion when the former showed their intention to deforest an immense and beautiful forest that was traditionally inviolable. In another domain, we observed individuals in Banlung (Ratanakiri) and Pich Rodai (Mondolkiri), spurning all customary ethic, using power saws combined with new technologies that, although high-performing, were nevertheless more destructive.

A knowledge of nature associated with an elaborate technical know-how

The educational level of indigenous populations if often said to be next to nil. This is simply because it is compared with our own concept of education, a concept that makes little sense for individuals whose apprenticeship to a life profoundly dependent on nature entails knowledge oriented to other exigencies. We examined in another work the vernacular forms of knowledge in a Tampuan village [Bourdier 1995b] and attempted to show part of the richness and complexity of their knowledge system pertaining to the environment. The relation to the earth is not merely an immaterial relation: vernacular languages of natural ecosystems are extremely elaborate, and indigenous populations, better than anybody else, are aware of the pedological, morphological and ecological diversity of their territories. Taxonomies of forms of relief, vegetal cover, different types of forests and soils, attempts to describe atmospheric and agro-climatic mechanisms developed over the course of centuries of observation testify to their concern to order the world, and their will to understand the world surrounding them, *while giving it meaning*. Most of the land models and specific forms of landscape have names that serve as geographic landmarks, and sometimes indicate the location of a spirit that be can invoked in prayers and with which an individual enters into "ritual communication" during illness or when intending to exploit the environment (hunting, fishing, wood-cutting, clearing of land, etc.).[31]

Thus, there exists well and truly a form of informal education in which oral transmission (biological, classificatory) passes from parents or grandparents to children, whereby each adult is most of the time responsible for his descendants of the same sex. For the Tampuan, the uncle on the maternal side also plays a significant role in awakening the mental potential of children and in teaching them techniques for using the plant world. The narration of myth, which has an impressive corpus in a single group, while constituting a cultural reference, is also an important source of information and knowledge.

There would much to say regarding indigenous techniques in the areas of settlement and crafts. They reflect a remarkable mastery of the plant world,[32] and one can only admire the dexterity and speed with which the Jorai and Tampuan people build in a few days a beautiful house on stilts, using only three tools (a curved knife on a long stick, a machete and a hatchet). The weaving of diversely patterned mats and baskets by men, and especially the weaving of loincloths, *sampot* and blankets - some of which are true works of art - by Jorai, Tampuan, Lun and Phnong women, testify to their productive and innovative skills in the field of crafts. By the same token, the remarkable products of the Kraveth, who know how to work silver (rings, necklaces, daggers and knifes),[33] and of the Brao in Ta Veng, who make alloys of various metals and fashion splendid and beautifully ornamented tobacco pipes, show that the forest people are by no means uneducated or lacking in know-how.

Considered from the inside, group identity is thus mainly based on kinship relations, a privileged relationship with the earth and the spirits inhabiting it, as well as on the religious cosmologies that follow from this relationship. It is not possible in the framework of this work to develop the ideas, behaviors, facts and values that constitute and reinforce the specificity of each group. We should once again recall that none of the ethnic groups in the north-eastern provinces would correspond to a body of people sharing a common lifestyle and that it is therefore pointless, or even inadequate, to attempt to give an account of the inherent characteristics of each group. Countless examples could illustrate this point and accordingly show the danger of any monographic study used as a frame of reference (for the implementation of pioneer projects) for development projects, and the hazards of disregarding variations exhibited by a given population. In groups such as the Tampuan or the Brao, dwellings, familial structure and a few elements of social organization may diverge drastically from one place to another. It is rather according to contexts of relations maintained with neighboring ethnic groups that different situations are formed and take shape: Brao in Ta Veng, who co-exist with Kraveth and Kachah, have more affinities and common points with those groups than with their counterparts in Banlung, Likewise, "it is wrong to believe that a geographic and social isolation would be the base of group diversity" [Barth 1969]. In Ratanakiri, as in Mondolkiri, the interpenetration and interdependency of ethnic groups should not be seen as a disarray of identities, but as conditions for their perpetuation. Any group, from the moment it takes shape, is destined to transform, change and to establish contacts with others. We will now examine this relational aspect.

The place of indigenous populations in global society

The consideration of the points of confluence and the conflicts ensuing of various contact situations now leads us to analyze processes of interaction between indigenous and lowland populations. This process began to intensify after the creation of Ratanakiri

and Mondolkiri provinces in 1959, a period of time that represents a major turning point for the future of ethnic groups, even should the changes not be uniformly perceptible in the entire territory of the two provinces.

First integration attempts

After having been slaves, serfs, domestics and forced workers in the past, indigenous populations were subjected to an assimilation policy in the 1960s. The Sangkum era, under Sihanouk, was marred by a civilizing mission respective of forest people. The purpose was to extricate them from prehistoric times, from their so-called ignorance, so they could benefit from the advantages of "Khmerness". This aim was briskly led by soldiers, appointed as the main protagonists for "minorities" development. One of the first actions undertaken was to bring them back to the center; consequently, the Brao and Kraveth villages around the northern banks of the Sesan were systematically displaced. Those who refused had no other choice than to leave for the Boloven region, in Laos. Indigenous populations were then promised logistic aid, materials, cattle, paddy and an allocation of territories so that they could practice rice-growing in the plains to the north and south of the Sesan. To set an example, Khmers from Takeo, Svay Rieng and Prey Veng were asked to settle in Koh Nyek district, Mondolkiri, in order to constitute a model village (Nikhum Samdech Oev) called Phum Sre Sangkum. They received 5,000 riels, two oxen and what they needed to build a house. Their coming and their work methods were supposed to inspire local populations.

It was also at this time than an educational system was established with the creation of schools in the principal villages. Initially, it did not appear to be very efficient and was hardly appreciated by most of the inhabitants because of the master/student relationship that was instituted and because of the intolerance shown by the promoters of this new knowledge who, moreover, were not much interested in understanding the social milieu into which they had been parachuted. In Mondolkiri, the situation was slightly different inasmuch as the Phnong had been sent to Kratie to attend training classes for primary school teachers so that they could themselves provide schooling in their own village.

The concrete achievements of the government rarely equaled their promises and, except for constraining these populations to establish their villages in the Khmer way, there was little change in agriculture, health or education at that time. Ideas were launched, but few villages were able to acquire the technical and material means or to obtain the training and apprenticeship necessary to install other cultural practices. Even so, Sihanouk's policies had shown that the government intended to take possession of and control the destiny of autochthonous populations, who now became Khmer Loeu, that is to say, highland Khmers.

In the early 1960s, some aborigines were induced to travel, others to live outside of the traditional limits of their forest territories. Men from the whole province were employed by French owners of rubber plantations and immense orchards in Pailin. A Tampuan man told us the circumstances of this temporary migration: "Emissaries came to the village to offer work in an area far away. We were told about Pailin, a massif where other *chunchiet* (vernacular designation for any ethnic group) like us lived. Two of us in our village agreed to go. I was a little more twenty years old at the time and my parents did not have any objection since I had other brothers to work in the cleared ground and I was not married.... All in all, we were a lot of people at the departure point: there were Jorai, Chirie (i.e., a Jorai subgroup), Tampuan, Brao, Kraveth, and Kachah. The journey (by boat and road) was entirely organized by our future employer. In the plantations, we lived in big dormitories and we were given food. I earned 300 riels a month. In some places, others earned more but they were not provided accommodation. I stayed for thirteen months. Then I went back to Ratanakiri." There were also organized journeys at that time, not only to work and to learn new agricultural techniques, but also to show the cultural richness and the country's geography to the new generation. A Tampuan remembers having gone with others from his village to Phnom Penh, Kep, Sihanoukville and Siem Reap. Visits to Angkor are undeniably what stood out most for the indigenous people from Ratanakiri and Mondolkiri: "We were shown sculptures representing our ancestors, the same people who had built the temples."

During our tours, we observed the deliberate intention of Ratanakiri inhabitants not to display their differences. "In Battambang, people were not able to see that we were cheunchiet (i.e. an ethnic group having its own language, etc.) We were dressed like Khmers and those who still had a chignon, cut their hair", an old Tampuan told us, adding that, "as for food, it was sometimes difficult to get used to it, but we didn't say anything". Candidates for migration told us they had tried to conceal their identity for fear of being mistreated or given a nickname such as *moï* (savage), *kha* (slave), the pejorative connotation of which relegated them to a low status.

The kindly, paternalistic behavior developed towards autochthonous populations changed in the late 1960s, when the first troubles broke out between villagers and the administrators who tried to mobilize them for rubber cultivation. To these vicissitudes were added other worries because, given the geo-political environment and the spreading of the Vietnam war to whole of Indo-China, it was feared that aborigines would ally with various insurrectional political movements springing up in the region. Ethnic groups were once again seen as a potential menace for the country's integrity because they were susceptible of siding with the communists, who were unequivocally viewed as enemies of the regime.

From historic trauma to the reconstitution of villages

The devastation of the Vietnam conflict spread to Ratanakiri in the late 1960s. But leaders of the Khmer Rouge movement (Saloth Sar, Ieng Sary, etc.) had already found refuge there and were beginning to develop their propaganda. After Lon Nol took power, republican troops allied with the Americans were sent to defend positions that the Viet Cong targeted or had already taken. The region became the scene of bloody fighting, especially along Road 19, still called Ho Chi Minh Trail.

War and American bombings did not spare villages that were perceived as potential bases of retreat for the Viet Cong. Many were totally destroyed and the inhabitants, when they had time to escape, were driven to take refuge, hiding always deeper in the forest. The use of napalm and B52s is still visible in some places in the form of craters along roadsides in the center of the plateau. Men suspected to be accomplices of the Vietnamese communists were shot dead - sometimes with their families - by Lon Nol's army. Conversely, others, accused of being sympathizers of the ultra-nationalist Cambodian government, were killed in the same way by the Viet Cong or the Polpotists. The Khmer Rouge took advantage of this debacle to secure their position. It is in this anarchic context, incoherent for indigenous populations, that they managed to settle and master the situation in the early 1970s in Ratanakiri and in 1973 in Mondolkiri.

Whereas some families had already escaped a few years earlier with the Americans (in particular the Kreung, Brao and Tampuan) and had found refuge in Massachusetts just before the fall of Lon Nol's government, incidents erupted very soon between Khmer Rouge and autochthonous populations. Villages were decimated,[34] *phum* chiefs and in a general way all who represented any form of sacred or political power (masters of ceremony, shamans, etc.) were systematically eliminated, sometimes by external Khmer Rouge elements, sometimes by indoctrinated youth, who in any case were forced to obey orders if they did not want to be accused of treason or killed in their turn. Entire Brao villages (such as Phum Phav, Phum Kah Pang) fled and reached Laos after a thirty-day trek, while many Jorai and Phnong went to Vietnam, particularly to the Dak Hodrai region in Pleiku, where more than 1,500 to 2,000 people found refuge. In Laos, according to Brao and Lun memories, the number of persons to have fled is estimated at 1,000: they came mainly from Phav, Tumpurn Roll, Ronveign, Kapang and Pankhot villages.[35] South of the Boloven, for example, the Laotian government organized a *khum* (a community responsible for administering several villages) for Brao refugees. Authorities granted them some land to make a rice field, domestic animals (bovines, pigs) and seeds. In other places in Vietnam and Laos, authorities offered professional training to refugees who wanted it.

Many inhabitants were not able to escape once the Polpotists had taken the initiative to control the main cross-border roads and to re-group outlying villages in the interior.

The arrival of the Khmer Rouge was to entirely change the social and spatial configuration of the settlement, its distribution and its relations with the ecological milieu. Needless to say, as everywhere else, entire villages were displaced and grouped in large work units, families were separated, children were sent to do construction work for collective use (dikes in Veun Sai, Talao, and Konmum). Most of the Phnong in Mondolkiri were displaced to Koh Nyek district, and the districts of Pich Rodai and O Reang were deserted. Phnong (Gar) villages in southern O Reang, near the Vietnamese border, were emptied of their population, suspected to be a nest of CIA agents. Numerous Kreung were deported to Kun Mum in the large valleys, while Tampuan and Jorai were settled along the banks of the Srae Pok. Forced marriages contributed to the interbreeding of ethnic groups and ground-clearing practices were, if not provisionally abandoned, at least delegated to older people, as we were told by old Jorai men in Ou Ya Dav. All religious traditions, as well as everything that represented the material wealth of local cultures, were proscribed and destroyed. The Khmer Rouge also decimated local populations. People still remember that men and women who showed any sign of weakness were massacred in the name of an old Pol Pot adage: “If you kill a weak person unfit for work, you lose nothing; but, if you let him live, you don't gain anything either".

In 1979, following the Khmer Rouge debacle, villages reconstituted themselves. Among the first concerns of indigenous populations were to return to places where their ancestors had lived, to perform once more foundation rituals, to again clear grounds in places that had been cleared by their ancestors and to re-baptize their village with the name of the founder.

Subsequent to liberation and the assumption of power by the Vietnamese, most of the villages were reconstituted as they had been prior to the aforementioned events. In Mondolkiri, new Vietnamese occupants set up the *krom sameakki* system, influences of which can still be found.[36] Most of the time, the Vietnamese allowed the populations to choose to stay in places organized under Pol Pot or to return to their villages. Rare are the indigenous people who did not go back to their deserted former settlements. They began again to clear the chamcar their ancestors had cultivated and, thanks to seeds distributed to each family, the life of the ground-clearers regained its previous rhythm. In Ratanakiri, because of the presence of Khmer Rouge bands between the Sesan and Laos, some groups like the Kraveth and Brao, isolated in the forest, were obliged by the authorities to migrate to the proximity of the Sesan, not far from Veun Sai. However, the absence of buffaloes and an insufficient mastery of rice-growing techniques, as well as the distance from clearable forests, induced the four Kraveth villages to go back to forests around the O’Lalai River. Refugees who had gone to Laos and Vietnam were also solicited by Heng Samrin's government, in the early 1980s, to return to Ratanakiri.[37] At the same time, with a few rare exceptions, Khmers refused during this period to go to the two north-eastern provinces, and it is above all beginning in the

1990s and particularly after the elections that land speculation began to channel new families and particularly new capital from businessmen in Phnom Penh or elsewhere (including other countries). The "snowball" effect increased because all the Khmers in the province, and especially those in Banlung, began to invest in land: no longer to make rice fields, but mixed cash crop on the red soils in the center, or kapok trees growing on the last sandstone slopes descending to the west of the plateau, where Kreung inhabitants are also found. Henceforth, main roads influence the settlement chosen by new occupants: the *phum* territory of the Kreung and Tampuan around the capital shrinks away. While some villages along the roads endeavor to remain, others, more or less resigned, go to the forest. The chances are great that this might be only the beginning of land monopolization, of changes in the socio-territorial organization of indigenous settlement. Consequently, economic relations, dependent on the new social forces that are appearing, are destined to take a new direction.

A turning point in socio-economic relations

We have seen that relations between ethnic groups in the eastern provinces were always maintained, notwithstanding distance and environmental constraints. Rivers, the Sesan in particular, were major axes of movement used by Jorai in Vietnam, who brought earthenware jars and the indispensable and prestigious gongs (a set of five gongs, not made of bronze, was equivalent to at least one buffalo, or three chi of gold). As for the Kreung, they went to purchase gongs made of a special alloy in Laos, seeking out especially those from Vientiane, reputed to be the best. The negotiations, which intensified in the dry season, represented not only a possibility for distant villages to exchange various products (woven clothes, tobacco, seeds, etc.), but they were at the same time an opportunity for meeting and reinforcing social relations between ethnic groups (reciprocal exchange of gifts, marriages, participation in religious ceremonies, alliances between "persons sworn-to-loyalty").

On another level, exchange between ethnic groups and people from the plains intensified with the settlement of new colonists. New commercial networks took shape. Before the Sihanouk era, for example, Kraveth and Brao collected rattan, which was well-valued by the Laotians and then by the Chinese. Khmers from Kratie followed long forest paths and bartered with the Rohong, the Stieng and the Phnong. Valuable essences derived from wood and ivory were sought as well as forest products. Salt was a valuable object of exchange and its agreed value was a function of its rarity (the ashes of certain trees had previously been used in its stead).[38] As for the Brao, who still resided far to the north of the Sesan near Laos, there were many diffusion networks from the Stung Treng road to the Siempang road, to ways linking Vietnam with the Tampuan plateau and the Dak Lay River south of the Bolovens located in Laos. A bowl of salt could be bartered for ten bowls of rice in isolated villages such as Kam Darang and Namavangin

located in the extreme north of the country and inhabited by small groups of Kanieng and Kayang. The Lun and Brao in Ta Veng also traded with Kaseng and Brao from the Attapeu region. The latter exchanged decorated pipes, pearl and metal necklaces as well as various bracelets worn by women on arms and ankles, before Pol Pot.

In Veun Sai, the arrival of the Chinese who had fled the Cultural Revolution seems to have been decisive for the development of exchange relations with the forest people. An extract from a Kachah myth deals in a short passage with their relations with the Chinese and illustrates the fraternity of the trade relations between the two groups.

In the past, all people were brothers, in particular the Kachah, who were the oldest, and the Chinese, who were younger. The first was responsible for his young brother and every time there was something to eat - like bananas or sugar cane - he brought it back to his younger brother. That is why, still today, Kachah take what they have to sell first to the Chinese in Phum Chen, Veun Sai.
(Source: an old Kachah man in Phum Ka'piek, October 1995)

Economic relations, whether in the form of barter, exchange or cash transactions, continue to occupy a prominent place in today's inter-ethnic relations, while taking on a new dimension. The creation of a central market, first in Bar Kaev when the zircon and jade mines were exploited, and now in Banlung, channels most of the regional trade. District markets play an important role despite their decentralization and their reputation for being more expensive and less well-stocked. The people previously moved and therefore maintained relations over greater distances: indigenous populations, who did not make pottery, went, for example, to the Laotian *phum* of Pal Ka Lai, in eastern Veun Sai, where two families made a type of jars particularly sought after. The latter, like many other products and foodstuffs, now go through the market. In Mondolkiri, there was a tradition of exchange between the Phnong in Koh Nyek, who sought rattan, and forest inhabitants in Pich Rodai, who gave them poultry and other foodstuffs. Likewise, the Kuy in Kratie, who would have learned cart-building techniques from the Phnong, bought buffaloes and coffee coming from eastern Mondolkiri and Vietnam. Magnificent jars, some of which are almost the size of a man, are to be found in every Phnong household and come from Vietnam. They passed - and continue to do so - through series of intermediaries (Phnong in Vietnam, Phnong Gar, etc.) to reach their users, who are scattered all over the province.

Around the provincial capital Banlung, over a radius of more than ten kilometers, Kreung and Tampuan (primarily women) come with products from their *chamcar* and from the forest: bamboo shoots, various fruits, banana leaves and, more recently, a few artisanal products - baskets, crossbows, pipes, gourd/colocynth, and small baskets - to the newly-created tourist shops. In return, the main products bought at the market are

MSG , salt, meat, fish, tobacco, cigarettes, clothes, sandals and jewelry for children. During the wet season, inhabitants, particularly women, of nearby villages (Phum Lepo, etc.) sell three to four times a week a basket of vegetables and bananas, which together bring only a modest sum of 1,500 to 2,000 riels (October 1995). During the dry season, food is scarcer: local ethnic groups then sell firewood, yams, squash and tubers. There is a market corner intended for them, but most of them prefer to sell door-to-door.

Laotian, Khmer and Chinese tradespeople (professional or periodic) move as well. When, beginning in October, the former go on fishing expeditions and set up a provisional camps on the banks of the Sesan, they take the opportunity to sell fish (smaller fish by *prahok* and larger by weight) to the inhabitants. Khmers and Sino-Cambodians, but also indigenous people, go regularly to villages by motorcycle to buy pigs and sheep. Every village accessible to two-wheelers is explored that way. The Chinese in Veun Sai have not established a loan/reimbursement system, but they have regular relations with populations in Ta Veng, Veun Sai and Andoung Meas. They buy surplus cereals, taking into account the (heavy) load and the transport of rice to the river by the peasants when fixing the price. A commercial gesture highly appreciated. In that way, they ensure faithful clients by offering better prices than government agents and other potential buyers. For example, they purchase sesame for 7,000 riels per kilo, whereas the others negotiate 5,000 riels per kilo. In return, they are assured of a quasi-monopoly of various products collected in the forest (gum, resin, animals, cardamoms, honey, etc.)

Tradespeople in Banlung who have settled more recently - Sino-Cambodians, Khmers, Chinese - comb the villages and try to buy rice in periods when it can be cheaply obtained (after the harvest). A rice-processing factory (that runs on petrol) was even set up by them in 1994, in Khum Sida in Lumpath district, so that the rice could be quickly blanched and marketable in large quantities.[39] They are the latest inhabitants who count among the real protagonists of market economy in the modern sense of the word, introducing speculation, indebtedness, dependency and hoarding.

In addition to this awareness of value and a better appreciation of prices (dollars are sometimes asked!), indigenous populations know exactly the development of prices for foodstuffs, from gathering to the final buyer. Thus the Kachah and Brao know very well that the medicinal root (*Kongao narrator*: peacock's tail) they gather and sell at 3,000 riels per kilo in Veun Sai is sold for 6,000 in Banlung and 9,000 in Stung Treng. They know as well what buyers look for, which products have a good price/value (durian, pineapple, corn, mango, *cwai chianti*, sesame) and which have little commercial value (cucumbers, yams, manioc, field vegetables, etc.)

A few small shops have been opened in the villages, selling basic products (cigarettes, tobacco, salt, MSG). They make a minimum profit and one cannot really speak of the appearance of prosperous shops. Apart from less precarious enterprises along the road,

only a few Khmer families try their fortune in distant villages where the inhabitants seldom have occasion to go to markets. Save for relatively uncertain economic success, integration is not always easy, inasmuch as living in the village means being equal to one's own needs (knowing how to build a house, having a *chamcar*) and, if not subscribing to local traditions, at least respecting them and participating in collective life.

Nevertheless, economic relations continue to go through kinship networks. Among the Jorai, Tampuan and Kachah, the clan is the basic unit of economic mutual assistance. Goods and foodstuffs circulate among families and local lineages, even though each nuclear family has its own field, its personal grain loft and its private hearth. It is possible to receive rice from one of one's agnates, but it is repayable as working time or another form of compensation. In Phum Lom (Tampuan), villagers say that gift exchange is circumscribed within the clan and that between two social units, exchange or immediate barter replaces gifts. Should there be a shortage of rice in a family with whom one has no special relation, rice can be lent as long as one knows that it will be returned. On the other hand, basic foodstuffs such as vegetables and, to a lesser degree, rice, can be taken from the *chamcar* of the extended family (agnates and cognates), but the mutual aid system has its limits. However, a few villages (other than those sponsored by an NGO) have a security mechanism to cover deficits of families in difficulty by establishing a common plot of rice, but it should be recognized that most of the *phum* do not have a traditional institution of this kind.

We are nevertheless far from believing in a redistribution of goods, assuming the equality of all members of the village society, as an author wanted to argue, trying to prove that South-East Asian societies are fundamentally against any form of economic disparity and compel the most prosperous families to give of their surplus at the time of religious ceremonies [Kirsch 1973]. A village in Ratanakiri or Mondolkiri includes pockets of poverty as well as wealthy families. Proto-Indo-Chinese societies are not egalitarian, even if differences are not flagrant at first sight. This does not preclude the presence of two types of parallel economies: the major type focuses on subsistence and the other on surplus economy. The latter is the result of the private initiatives of a small group of people who managed to accumulate goods (those in Mondolkiri who own several elephants, for example), to attain a noteworthy profession (non-commissioned officer, etc.), or to embark on or create an agricultural practice oriented towards the market economy. It is above all the achievement of those who have for many years demonstrated their intention to keep their land.

Impact of government policies and outside private initiatives

In ground-clearing societies in Cambodia, the village traditionally constitutes the highest unit of socio-political reference. A council of elders, the number of whom is proportional to the size of the village, but independent of clan or lineage composition, sees to

it that customary rights are respected and resolves internal conflicts. There is no group, no inter-village confederation able to establish a regional, territorial or even social power that surpasses the limits of the village,[40] except for the Jorai *potao*, whose existence in the mountains of Vietnam [Dournes 1979] is not relevant to the geographic context of this study. We also discern no apparent hierarchy among clans, nor any institutionalized power in them. This does not mean, however, that the village is a closed social entity, a microcosm that would refuse any form of state or outside oppression. Kinship ties - thus, regulation of social relations - go beyond the narrow framework of a group settlement, and some individuals whose social charisma, magico-therapeutic power or religious function is recognized over a vast area are instrumental in qualifying the theory of the village conceived as a small, autonomously functioning republic.

Government policies have modified the rules of the game by imposing on the classic organization the administrative division of the territory into district (*srok*), commune (*khum*) and village (*phum*). Those responsible for the *srok* and the *khum* (*mekhum*) are chosen by provincial authorities who appoint the *mephum* in consultation with the population (majority approbation by the raising of hands). In Ratanakiri and Mondolkiri, all persons representing modern chieftaincy come from the village they are to administer. They are elected according to their ability to speak Khmer and their personality. In fact, their function is more to pass on information and directives from the government,[41] which are not always well-accepted and are sometimes received with suspicion: one is thus justified in raising questions regarding their real decision-making power and village representation, as well as regarding their possibility to speak in the name of the community, to make and support concrete demands. In the case of an epidemic or famine, they are in a position to request medical aid or foodstuffs, but their investigation stops at that point. Their work is done in the other direction: they transmit to superior authorities problems that are not, or cannot be, resolved in the village. In fact, the *mephum* does not hold a real power; he is rather someone who is solicited in order to obtain external aid, an intercessor between the village and the outside world. This becomes especially clear during religious festivals and intense moments in the social life of the village, when he becomes a normal individual whose position depends on his place in the kinship.

In sum, for village issues, the council of elders and the master of ceremonies (*kak chrok* and *kak namchea* among the Brao), whose spiritual role is crucial during religious events, are more entitled to give their opinion, whether concerning the maintenance of order and tradition, important decisions (to move the village, for example), or pertaining to the internal resolution of familial and lineage conflicts. These men are "those who know", to use a vernacular expression, and, in this regard, several *mephum* and *mekhum* spoke to us about their difficulties in adjusting their official function with village custom, which is "stronger than them".

Apart from this ambiguous social position, which nevertheless imparts a certain importance to individuals responsible for linking the village with global society, it is now possible for indigenous people to get a job and perhaps to accede to a high position in the government. This is a recent tendency, inasmuch as it was almost absent in the Sangkum era. The Khmer Rouge had begun to promote medical training for villagers, but it was above all starting from the Vietnamese occupation, with the development of an educational system, that numerous indigenous people began to occupy significant posts in the army, police, administration and government: from the rank of general, responsible for a department (one Kraol for education in Mondolkiri, one Kreung for justice and one Tampuan for tourism in Ratanakiri) to the office of governor held by a Brao person in the early 1990s in Ratanakiri. Even though the possibility of attaining these posts is seen as a personal promotion accessible to anyone with an education, autochthonous populations do not think their collective destiny would for all that be systematically improved. The Phnom whom we interviewed in several *khum* say that indigenous representatives in the government provide ideas to develop villages, but are not able to materialize them. In other words, these nominations met with symbolic approval, their position is respected, but the people are not convinced that they can answer the demands of the inhabitants better than the Khmers would in their position. As to whether those in responsible positions or leaders "from the region" are listened to more than their Khmer counterparts, it is impossible to generalize. Apparently, some villagers are not particularly impressed by all this, while others do not hide their pride, especially when the "important man" was born in their village or belongs to the family, and consequently favors his own village in matters of work opportunities or development and infrastructures.

In Mondolkiri, about fifty Phnong are employed in the provincial administration, and in Ratanakiri many villagers work in diverse sectors of development (health, education, agriculture, etc.), having been trained (state nurse, primary school teacher, agricultural assistant, etc.) in Stung Treng or in Phnom Penh. Moreover, many young people are recruited into the police and army.[42] But it is important to underscore that most of these men remain above all farmers/ground-clearers because their wage, added to family pressure, does not absolve them from working on the land.[43] The government thus adapts schedules to the agricultural cycle and the distance of the villages: in Ta Veng for example, soldiers are only mobilized one week out of two so they can regularly return to their families and participate in fieldwork. Despite this flexibility and the attraction of a uniform, which confers on young men an envied and prestigious status (in a male society), as soon as high ranks have been attained, it is not rare that soldiers, policemen and civil employees leave their job or consider quitting in the near future. While the derisory wage is an important factor in their lack of motivation to continue, the cause of their withdrawal is primarily to be sought in family conflicts following

from their non-agricultural activity. Be it in Ratanakiri or Mondolkiri, similar statements are made by those who retain their job. They express their difficulties in combining village life and family relations with work outside the village: “Our wives do not understand why we continue to work for the administration. They think that this kind of work is useless because it does not allow us to bring back enough money. They want us to work in the *chamcar* or in the rice field". Bitter remarks spell out these conflicts between men and women on this subject, for example, when the wife tells her husband: “You eat your work, so don't eat my rice". In ground-clearing societies, where physical work in the field (felling of trees, house-building, etc.) is a *sine qua non* of a man’s status, there is no worse insult than hearing that the master of the house is not able to put food on the table, that his wife must do what would normally be the man’s work.. And, several men told us during our October visit: “If you see that our offices are empty at the moment, don't be surprised. We are obliged to come back because of our wives - otherwise they are in charge of all the farm work. We are ashamed because of that and can only go to the *chamcar* again”.

“Government agents", as villagers call them, nevertheless benefit from prerogatives arising from their integration in local communities and their intermediary role between authorities and ordinary inhabitants. Some are able to capitalize on their role by manipulating their status or exaggerating their responsibilities, for example, when they take advantage of their passage through villages to buy rice and other marketable goods, stipulating that they are doing this “in the name of the government", whereas it is a purely private initiative.[44] These men also pass on information from one village to the next. Health workers who take essential medicines to the most remote corners (one per *khum*) come from local communities and are recognized as important figures, even more than teachers. Regardless of the criticism that can be leveled at the public health network, the dynamism and tenacity of those who provide medicines and health advice, despite limited means, must be acknowledged. In areas where malaria and respiratory diseases are responsible for an extremely high mortality of young children, itinerant health personnel trek long distances, listen carefully to requests and endeavor to find alternative strategies (traditional medicines, consultation and exchanges with their counterparts in the health care network) when they do not have the necessary supplies to fulfill the immediate needs of sick people. Their work is complicated by expectations of the local population concerning intervention: the fascination surrounding injections co-exists with the recourse to traditional practices (sacrifice to the spirits thought to be at the origin of the affliction,[45] use of plants, barks and roots, supplication of divinities through possession phenomena, etc.). Families prefer, when they can, to go to retailers of injectable medicines, despite the exorbitant prices of the latter.[46] The provincial hospital and district dispensaries are maintained primarily by Khmers and Laotians and we were told by inhabitants of a village near Banlung that they felt discriminated against when they went to the hospital: “We are treated brusquely and Khmers mock us, asking if we drank rice beer and made a sacrifice before coming to see them”.

Finally, the impact of education is negligible despite the heavy-handed attempts of those in charge of promoting primary schools in villages and training teachers who belong to indigenous groups. Education is in Khmer and the curriculum is based on Khmer values. It is not adapted to local ways of life and lacks flexibility. It is hardly possible for families to regularly send their children to school because field work must be done far from the village. It is rather during the period between mid-December and mid-March that families return to their houses and it becomes less difficult to bring the students together.[47] During the pro-Vietnamese regime, young people who wanted to continue their studies were sent to secondary schools in Phnom Penh and others received educational training (at the center in Tuol Kork district) for a maximum of two years, after which they joined the army. Scholarship systems for young students were rescinded in 1993, when the Paris Agreements were signed, after which secondary schools were opened in the two provincial capitals. But, until now, no possibility of accommodation or financial support has been instituted.

One meets not infrequently parents who are aware of the advantages offered by schooling, although they complain that teachers are not always competent and motivated, that schools are too far away, the curriculum is inadequate, etc. The real causes of the partial failure of the educational program are therefore to be sought in the conditions under which educational projects are developed, in the lack of knowledge of the social and cultural mechanisms with which the projects must be correlated, in their inappropriateness with regard to the villagers' lifestyle and in the more or less openly displayed disdain of the “ignorance” of the forest people.

Other factors of socio-cultural interaction

Numerous people (but rarely women) were, at one time in their life in close contact with the Cambodian Khmer world. Most of these men traveled outside the province. Through their experience, they contribute, once back in their homes, to extending the geographic horizons of their fellow villagers, telling what goes on elsewhere, what they saw and heard. Village society is farther than ever before from being a so-called closed entity, something it in any event never completely was.

It is above all through language that inter-cultural relations, communication between different groups, are concretized. A significant characteristic of ethnic groups in Ratanakiri is that many vernacular languages are spoken, languages that are sometimes very distinct such as Jorai and Brao. The learning of the nation's language, sometimes even French in the case of a number of Phnong in Mondolkiri, adds to this prominent multilingualism. In Ratanakiri, very few women speak Khmer correctly, apart from

those who live in the capital and surrounding villages. On the other hand, there are always men in every *phum* in the province who more or less master the national language. The situation is different in Mondolkiri, where it is now exceptional to meet a Phnong man who does not know Khmer. Many women in the dominant ethnic group speak and read perfectly the Cambodian language and in some Christian villages they know - in addition to Khmer - how to read and write their language in Roman script. This linguistic interpenetration is even more obvious in Stung Treng, where every Brao in phum Kato can speak like the Khmers, even though Brao (slightly mixed with Khmer) is still spoken within families. The Kuy, who are not very numerous and are intermingled in predominantly Khmer villages (*phum* Kachirom, *phum* O'lan, etc.), told us that only man and wife conversed in their language in the family and that they now spoke Khmer with the children.

Religion constitutes a meeting point. Although there were until very recently no missionaries, Christian movements have existed for around ten years in Mondolkiri and since the early 1990s in Ratanakiri (around Banlung). Traditional rites are languishing in these villages, at the same time as rice beer consumption disappears, although Catholics, unlike Protestants, continue to drink it.[48] Relations with the Christian religion are also transmitted in myths from one group to another, as is illustrated in the one below, in which the myth of the biblical original sin (adapted to the local cultural framework) is recounted by a Kachah man; it was probably borrowed from Jorai who were Christianized in Vietnam:

Here is how man became independent from Brah God. A long time ago, Brah created animals, nature, a man and a woman. The latter still had no knowledge and no savoir-faire. They did not have to work, for Brah provided everything, including food. They lived together for several years without having children. But there was a snake that knew the secret of Brah's tree; it was a tree with magic powers. The snake revealed the secret to the couple, telling them that if they were to eat fruits from the tree, they would then acquire knowledge. The couple ate fruit and acquired knowledge. The other animals however were afraid and refused to do the same. The man and the woman felt ashamed because they were naked. So, they took tree leaves to wear as clothes. When Brah came, he asked them what they had done. They explained that they had eaten fruit from the sacred tree. Brah became angry and told them that from then on they would not be under his protection and that they would have to count on themselves to satisfy their needs. Brah understood that the snake had started everything. He decided to punish it and condemned it to slither ("chest against earth") forever. Brah destroyed the magic tree, but small pieces were scattered on the ground. Other animals ate these pieces and gained the instinct they still have today.
(Source: an old Tampuan man in Phum Ka' pieh, 15 October 1995)

In some mountainous villages located near a Khmer or Laotian settlement that has a pagoda, forms of interaction take place with Buddhism. This is notably the case with the Phnong in Sen Monorom and with Kreung, Brao and a few Tampuan around Banlung. Many young people now go to the Wat for large annual Theravadas celebrations and it is not rare that some of them speak of reincarnation, and sometimes consider becoming monks - but for a limited period of time! In a village near Banlung, a young man recently became a monk, just as many Kuy in Stung Treng have become monks. In another village in Ratanakiri, the inhabitants sacrifice a buffalo on the occasion of the Khmer New Year and visit the graves of their parents for the festival of the dead during the rainy season. Reciprocally, there are Khmers and Laotians who participate in religious ceremonies and conduct rituals with their autochthonous neighbors.[49] Instead of seeing this intermixing as an acculturation process, it can be understood in a more positive perspective as an emanation of a reciprocal will of members of different groups to get closer to one another on specific occasions, without merging completely with one another. Of course, we must remember that adherence to Buddhism - as the current practices of the Khmers illustrate - does not imply the disappearance of cults and beliefs that were customary prior to its advent.

Another form of socio-cultural interaction can be found in the behavior towards health. Many Kru healers were initiated in Khmer and Laotians pagodas. Indigenous populations recognize their healing power and their knowledge of medicines and do not hesitate to call on them when misfortune or serious illness befalls them and the village.[50] Some of these Laotian specialists go so far as to settle in villages to offer their services to inhabitants. This is not exceptional and we met such specialists in a number of Tampuan villages in southern Bar Kaev.

Other events in village life provide opportunities for indigenous and non-indigenous populations to meet. Mixed marriage is not rare but, according to our personal observations, most of the time leads to a progressive assimilation in the Khmer world, apart from the rare occasion when the couple goes to live in the indigenous community.[51] By the same token, the borrowing of food practices and table manners are frequent (although many Khmers are horrified at some of the culinary specificities of the indigenous people). We will only mention the Laotian preparation of ambok rice, which is widespread among the lowland populations, as well as the occasional consumption of prahok and the use of MSG, which has become an indispensable flavoring for any respectable dish.

It is at present undeniable that young people are attracted by the Khmer world. For them, it means access to consumer goods, a life they imagine to be easier, as well as opportunities to earn money. In recent months, teenagers with mopeds have become motor-taxis in Ratanakiri, while others observe Khmer actions and behaviors and adopt what they find interesting or what is likely to interest their family's community. Less

frequently, youth reject tradition, like a Jorai from Ou Ya Dave who decries the fact that his people waste time and money in making sacrifices and invoking the spirits. The diversity of situations and attitudes calls to mind what we noted at the beginning of this study, that is, an ethnic group does not constitute a static, homogenous, uniform entity in which all members evolve in the same manner.

The perception of the other and of oneself through relational attitudes

The variability of inter-ethnic behaviors and attitudes is found in the diversity of opinions and ideologies that one group conveys to another. It is in fact difficult, or even hazardous, to generalize in this regard because opinions differ from one person to the next, from one group or one place to another. What is more, these perceptions are influenced by geographic and demographic contexts and by the level of intensity of contacts, as mentioned earlier. Every social representation is inscribed in a precise socio-territorial framework and should not be analyzed outside of this context. We will attempt in this last section to give a few examples of inter-cultural relations, endeavoring to carefully bring out the most significant aspects, aware of the paucity of reliable data we have been able to gather on this subject, in order to avoid commonplaces and generalities that could hide the real data involved in the problem. For this reason, we will focus in conclusion on different perceptions of development, because they seem to us to be particularly indicative of conflicts and representations that one group conveys to another, according to whether this group is in the position of the one that "gives to the others" (dominant group) or the one that "receives from the others" (dominated group).

Social representations of autochthonous populations

Most of the preconceived ideas regarding ethnic groups ensue of a deep lack of understanding of the richness and diversity of their culture and practices. Since French colonization, highland ethnic groups, then called *kha* (slaves), *moï* (savages), were subject to social representations that persist to our day. The forest people were successively described as savages, semi-nomadic and unorganized bands, as half-starved hordes incapable of meeting their food needs, superstitious, ignorant and retarded peoples. Not to speak of their cultural practices, which were compared by one editorial in the review *Cambodge d'aujourd'hui* [1964: I, 20] to a "wasteful agriculture".

Their propensity to live in the forest and remain in privileged contact with the surrounding environment gives rise to biased interpretations. The image of the primitive who lives naked, or almost, in nature and builds crude houses with rudimentary tools continued to foster the clichés to be found in the records of French administrators until the Sangkum period. In a propaganda publication for development and tourism in the 1960s, one glimpses young girls, topless, innocently bathing in waterfalls in Ratanakiri, as well as couples lazing about in the shade of trees without a worry for the morrow.[52]

These idealized scenes reflect a conception of peaceable indigenous people, like the "noble savage" of Rousseau. But unlike a contemplative view that would induce the observer to leave the "primitive" in peace, it was a matter for the state, responsible for a civilizing mission, to take them out of the Stone Age in which they would have foundered since time immemorial. A *Cambodia Today* [1962: XLIII, 19] article, very evocative of this spirit that is still current today, asserted pathetically: "Until now, poverty seemed irremediable. Today, hope is reborn."

A corollary of this subjective assessment is that aboriginal populations are unable to project themselves in time, even for a relatively short period (an agricultural year). Government civil servants in Banlung told us that, they had "to teach them not to think on a day-to-day basis, otherwise they will continue for ever to die of hunger". Another high-ranking representative of the provincial government in Mondolkiri explained to us that "since the beginning of mankind, these populations (i.e., the Phnong people) have chronically suffered from hunger, disease and malnutrition". In a previous work [Bourdier 1995c], we attempted to show that agricultural production is far from being systematically insufficient. Such observations regarding Vietnamese lowland ethnic groups were demonstrated by several authors whose scientific repute need no longer be proved [Condominas 1983, Boulbet 1995, Dournes 1980]. In Ratanakiri as in Mondolkiri, many ground-clearing families have a surplus of harvested rice and exchange or sell it to lowland populations. In November 1994, we observed that inhabitants in the Sesan valleys, whose rice fields had been severely damaged after flooding, followed by dryness, go to the *chamcar* in Kraveth or Brao villages to gather a few baskets of rice. It cannot, of course, be denied that ground-clearers are not exempt from an episodic famine, no different from Cambodian peasants, but this is by no means a characteristic trait of agriculture in indigenous societies. It should be noted that no serious nutritional investigation has been undertaken in the north-eastern provinces, where nothing would substantiate assertions of serious and endemic under-nutrition. Doctors at the hospital in Banlung and NGO teams working in the fields of health and rural development acknowledge that they did not observe a large number of cases of serious food shortage. The postulated incapacity to project into the future is widely refuted by the many examples of families who welcome the idea to turn, in addition to their subsistence economy, to a cash crop, such as coffee in Mondolkiri or orchards and market gardening in Ratanakiri. When we asked an old Tampuan in Ou Chum why he had never sold his land, he answered: "Last year I earned a few riels by selling fruits and vegetables. If I sell land, I earn a lot at once but I loose in the long-term because I had to wait for a long time before my trees could give any fruit." One of his colleagues, with whom a Chinese man in Banlung had offered to exchange a patch of land against a Honda motorbike, answered very clearly: "*Your engine rusts as time passes, like the end of my pipe. But my* chamcar *does not rust*".

It is commonly heard from government representatives, as well as from lowland populations, that if ethnic groups die of hunger, it is because they are overwhelmed by superstitions, fears, beliefs that lead them to sacrifice a large part of their food to the spirits. They must therefore be educated in order to prevent them from practicing "useless" activities and from performing the many ceremonies that punctuate the agricultural cycle and must be taught not to kill domestic animals during religious festivities, as the effects are negligible. In fact, as was said elsewhere, religious practices are essentially intended to ward off divinities thought to provoke disorder in society [Dournes 1980:13]. Rituals to this purpose have a reassuring function and at the same time strengthen ties among community members. As to the so-called waste of food in the form of rice beer and meat products, it has to be said that nothing is squandered, but rather is consumed by the participants. We may add that the consumption of the meat of domestic animals provides a protein and lipid supplement (pig's fat, etc.), usually absent from daily meals.[53]

Representatives of a Phnom Penh Ministry, whom we met in 1994, proudly said that "most of the Khmer Loeu are stupid, because they have no education and do not want to get any". And these white-collar men add, "They are basically retarded and it will be very difficult to lead them out of their ignorance". A statement heard in every government environment, and sometimes in NGOs, is that autochthonous people "do not know about" or "are not aware of, what surrounds them". In sum, we are given the impression that, prior to intervention from outside, there is nothing that would be well-grounded in those populations. The remarks of a Laotian man working for the administration reveals this spirit: "They do not have any government or religion. Most of them live in the forest like animals" (statements made by development workers, as quoted by H. Jonsson 1992: 5). In fact, precisely the contrary occurs. Development actors are not concerned with a socio-cultural void, but with highly-structured societies. Social organization, kinship rules, customary rights and proprieties are extremely complex and rigorous, and it is wrong to believe in promiscuity or in the insouciance and complete freedom of highland societies. It is obvious that illiteracy is far from having been eliminated, especially among women, but the process has begun, in the face of difficult conditions (lack of materials and teachers, family life on the fields, etc.). On the other hand, one should not forget that oral tradition is extremely rich in epics, legends and tales, most of which have an educational function. There are persons able to recite from memory thousands of verses during a whole night, using mnemonics and innovation; those narrations demonstrate the imaginative capacity of these populations and their aptitude for imparting knowledge and participating in the awakening of the younger people.

There are countless fallacious perceptions that combine to create and justify relations between those who dominate and those who are the supposed beneficiaries of development programs. Nevertheless, as regards the brief critique of frequently entertained notions, we must recognize that nothing justifies appellations like retarded, uncivilized, ignorant populations. As one of the greatest thinkers of this century observed: "the barbarian is above all the one who believes in barbarism" [Levi-Strauss 1962].

Referring to what some Khmers and Laotians living in close contact with indigenous populations think, acerbic remarks arising from a grave misreading of the others must be nuanced. Those who co-exist are most often the most tolerant and most inclined to dispense with overwhelming stereotypes. Many of the lowland people know the local traditions, learn vernacular languages and appreciate invitations to Tampuan, Brao or Phnong festivities. Given that they live in the same ecosystem, they are aware of the forest people's remarkable adaptability to a difficult environment and turn to them to learn indispensable techniques relating to subsistence and the use of nature, be it for feeding themselves, searching for building materials, hunting, fishing, getting one's bearings in the forest or treating illness. Finally, they realize through experience that these populations accept them, are tolerant and respect their differences and that, ultimately, peaceful coexistence is not inconceivable, but enriching.

What indigenous populations think of themselves and of others

We may wonder how autochthonous people, often disparaged by the government and the newly-settled populations, react when faced with these prejudices, the list of which is far from exhaustive. How do they conceive of their new neighbors? How do they experience their integration into global society?

Contrary to what may have been said about Vietnamese highland ethnic groups, populations in Ratanakiri do not feel "diminished" when in contact with Khmers. They remain proud of their traditions[54] and do not hesitate to include new elements in them, and are aware that they are able do certain things better than the Khmers (connected with their ability to hunt with crossbows, weave beautiful blankets, forage products in the forest, etc.). There is no, or hardly any, feeling of shame regarding their way of life, although they acknowledge that Khmers, Laotians and Chinese "manage better", that is, know better how to earn money.

Ethnic groups also know to judiciously manipulate their identity when needed: parallel to "private" ethnicity confined to village life, "public" ethnicity develops during relations with Khmer society. In other words, they do not behave the same way in the group as they do with a non-autochthonous majority. These elaborate strategies testify to the concern of local populations to draw limits between what they want to show to others and what must remain inside the group. They thus preserve elements of their cultural identity by only revealing certain forms of knowledge. In fact, cultural identity is maintained through keeping some things secret. It is, for example, difficult for an unknown person to get detailed information about medicinal plants, to get an explanation from

Phnong Biet about techniques of elephant taming or to get translations of secret words in some of the myths symbolizing people's memory.

Most of the villagers we met recognize the advantages of speaking Khmer or Laotian. While the vernacular language is retained in the group, they know that the national language is indispensable for exchange and for establishing long-lasting social links and working with Khmers. A Lun man eloquently explained why he wanted his children to learn Khmer: "There was previously no exchange apart from commercial relations because we did not understand each other. This is maybe why there were wars in the past - now we can cooperate. I have Khmer friends who visit me frequently; Laotian fishermen and Chinese traders sleep at my home when they go up (the Sesan River) in *sampang*. I put them up and know I can ask them for some services. This is how I understand the meeting of populations". Linguistic sense is held to be essential, although some old men are aware of its limits: "We cannot express everything because there are many words in our vocabulary (i.e. Tampuan) that have no equivalent in Khmer; there are also more and more Khmer words that young people integrate into their everyday language. In my time, it was the Laotian language". However, some regret that young people in frequent contact with lowland inhabitants neglect their own language.

If villagers are asked what they think of the appellation "Khmer Loeu", they usually answer: "This is better than names we were given before. We were called *kha*, others called us *Phnom* or even *moi*". Not all are of this opinion; several Kraveth were offended by this name and expected to be called by their ethnic name. Brao and Tampuan feelings in this regard seemed to range from indifference to acceptance. One often obtains the answer that the designation Khmer Loeu only means Khmer living in the highlands and that there is hardly anything to say against that, because they really do live in the north and in the highlands. As for the employment of the term Khmer, indigenous men and woman told us that this expressed the concern of the government and lowland peoples to consider them as their brothers. Thus, contrary to what one might think, the meaning given to this appellation appears not to be pejorative or alienating and is relatively tolerated, at least in appearance. In some extreme cases, autochthonous people who manifest their intention to get closer to Khmers, to live among them or even to migrate to another province, are perhaps those who most adamantly reject the epithet "Khmer Loeu", to hide their origins. A Phnong woman told us that her children, soldiers in Phnom Penh, "pretended to be Khmers to avoid mocking remarks from their colleagues".

The main discriminatory attitudes therefore do not pertain to linguistic integration (Proto-Indo-Chinese societies are already multi-lingual), nor to the names they are currently given. It is rather prejudices perceived in the behavior of the authorities that most distress them. Numerous villagers expressed their frustration when they were required to move their villages to sites along the road or near a river: "We are not asked about

our opinion, we have been there for generations and then people who have just arrived enjoin us to move without knowing what the location of the village means to us, to our ancestors". Others showed their consternation, tainted with incredulity, when we alluded to projects for land occupation without consulting them beforehand. Nothing could be clearer than this reply by a Kreung man, whose village had to change place and configuration: "This is a dictatorship. We went through subjugation and the terror of American bombings, under Lon Nol, under Pol Pot and even later under the Vietnamese. When will we be left in peace?" Nevertheless, not everything is refused en bloc and inhabitants of the upper plateaus accept and acknowledge the warranted health programs (free medicines) and good intentions of a few Khmer civil servants towards them. It is less in the activities properly speaking of those who intervene from outside than in the quality of human relations that the grounds for understanding are reinforced or squandered.

Finally, it should be underscored that indigenous populations are aware of the fact that Cambodians too frequently associate them with the Khmer Rouge. This unjustified opprobrium, which some authors do not reject, is perhaps the most distressing burden for these people, who have suffered and were victims just like the others. This belief of the "lower" Khmer is to be found in the distrust shown towards them in certain situations. A personal anecdote illustrates this: in October 1994, as my assistant and I were following a narrow path in the forest to reach a freshly cleared ground, a Brao man accompanying us remarked on the sly that my "faithful assistant" never wanted to walk directly in front of him and his companions, for fear of being set upon and killed from behind, as in the time of the Khmer Rouge.

Respective ways of conceiving of development

Various perceptions and ways of seeing the world appear in the different conceptions of development or, more specifically, of the future. Generally speaking, development is mainly considered in economic terms by the government. The aim is to integrate indigenous societies into the market economy, to make them productive by converting them to irrigated rice-growing or employing them as workers in prospective plantations. Health and education are of course among projects for the improvement of living conditions, but the political use made of these development sectors, however useful they may be, threatens to nullify their real objective (to promote well-being and awaken mental potential) by making populations dependent on external aid and using education more as a Khmerization strategy than to set them free and provide individuals with the means to face the harshness of the modern world.

It does not occur to Khmers, even the best-intentioned, that "non-civilized" populations can make their own contributions towards the development of the provinces through their profound knowledge of the environment and nature and the knowledge

they have evolved pertaining to the modes of traditional management of the plant, animal and mineral world. Thus, a one-way communication is established, of which the Proto-Indo-Chinese are perfectly aware, for, after all, they ask no more than to assimilate *certain* elements of the Khmer world. At the same time, most of the forest people are intent on maintaining essential values, to which are added a way of life punctuated by work in *chamcar* - or rice-fields- and a period of respite allowing the village to regain its unity, to share intense moments during numerous festivals and ceremonies. Let it simply be said that these periods of intensification of social relations are no more occasions of useless spending than those occasioned during the large Buddhist festivals of the Cambodians.

Very schematically, the indigenous populations want to preserve what provides satisfaction in their way of life, to have access to certain consumer goods, to be free from economic instability, to lead peaceful and relatively free lives in an extended family. They are absolutely open to change as long as they remain masters of their future. Complete adoption of a sedentary lifestyle and the notion of property that is passed on to one's children constitute new values appreciated by a large number of them. Some entertain the ambition of occupying a recognized place in Cambodian society, and thus turn towards the Khmers. Moreover, increasingly more women and men realize that they can reduce their daily tasks and improve their quality of life by adopting new practices. This is the case of women who are relieved by being able to take rice to an automatic rice-processing plant to be ground, and of men who want to reduce the size of their cleared ground to devote themselves to rice-growing or other cash crops. For this reason, while the villagers recognize that they invest an enormous and inordinate amount of work in view of the sufficient but limited results, they nevertheless want to keep their cleared patch of land, not only for the sake of tradition, but quite simply because it is seen as a "security field", the productivity of which, although not excellent, will never be completely bad and, what is more, is diversified (more than thirty or so plants, cucumbers, fruits, roots, vegetables and tubers are sown alongside numerous varieties of rice). Conversely, they see the advantages of rice-growing (less work) but also its inconveniences, which are inherent to any monoculture (risk of losing a harvest during floods, as in 1994; disease destroying a unique variety of seed.)

It is most of the time because of the lack of means at their disposal that local populations do not modify their practices. Those who would like to establish orchards have a hard time finding seeds, which the government does not furnish, notwithstanding its promotion of agricultural diversification. A large number of Tampuan told us that they hoped to avail of a government loan system to buy land rights, to invest in small plantations or to buy a minimum of modern equipment required to commence new farming practices. But these grievances go unheeded for the moment. It would seem that the Phnong in Mondolkiri fare better because of the support they get from the Phnong in

Vietnam (coffee plantations) and from the department of agriculture, which furnished inputs (motorized cultivator, tools, etc.) in Pich Rodai and Koh Nyek districts. Once should moreover note the lack of attraction of agricultural paid labor and, *a fortiori*, of work on plantations. Young people in Ta Veng and Veun Sai districts told us with vehemence and conviction: "Rather die than do that". The idea of a job with restrictive hours, the capital goods of which elude them, appears incongruous and unacceptable to a vast majority of Proto-Indochinese.

In an attempt to avoid conclusion

If we wish to adopt a deliberately critical point of view in the final section of this chapter, it is not with the intention to systematically denigrate the efforts undertaken by development actors, but to highlight a number of risks that will be incurred in the near future if the government rushes headlong down an overly-controlled path without previous dialogue with the concerned populations. We cannot deny that some very good things are being done and we can only encourage intended efforts in the fields of health, education and agriculture. The issue is to know how and under which conditions to establish sustainable development that is adequate and appropriate for the aspirations of local ethnic groups.

Identity reconstruction or elaboration of new points of reference?

Historical events during the past twenty-five years have modified regional features and accelerated the process of social change. The period of insecurity, in which international armed conflicts, guerrillas, the coming of the Khmer Rouge and the most diverse political regimes succeeded each other, ineluctably shook and put to the test traditional points of reference. Deep scars unquestionably remain in the memories of the forest people, as in the memories of every Cambodian person.

At first sight, it may seem that primarily material culture was subject to irremediable losses (old copper gongs, the splendid weaponry and jewels of the Kraveth, etc.). In fact, the trauma is deeper than it seems, although populations are still reticent about this period of time. However, the decline of Proto-Indo-Chinese identity is far from complete, despite a decrease, or even extinction, of certain original traits related to intellectual and material culture.

In fact, the cultural content of an ethnic group can change without its identity weakening. When living in 1995 in a Tampuan village on the central plateau in Ratanakiri, we observed the persistence of social machinery and solidarity mechanisms that had existed twenty years earlier [Matras 1983], despite the absorption of new values such as the subscription to Khmer behaviors and the introduction of a monetary economy.

Each group integrates new elements (imitation of food practices of the lowland people, adoption of new agricultural practices) and asserts its new identity through its rela-

tions with other groups; it redefines its socio-cultural borders by mechanisms of exclusion (references to clan or lineage, definition of territory) and inclusion (mixed marriages, generalization of forms of sociability between ethnic groups in the province) of surrounding populations, and may strengthen some particularities previously employed as cultural markers (consumption of rice beer, the role of dreams, ceremonies for ancestors, the practice of ground-clearing). Not to take into account this capacity of innovation and symbolic manipulation of cultural references is to forget the dynamic and creative dimension of Proto-Indo-Chinese societies, which are well and truly constantly renewing societies.

Facing the decline of old traditions (use of *pathiel* succulent plants, which the initiated used for "the flight" of the soul) and the disappearance of certain roles (the shamanic *kong* of the Kraveth and the *pasloep* of the Kachah, who were eradicated during the Khmer Rouge period),[55] others take their place without necessarily filling a strictly identical role, although they are similar (Laotian healers going to the villages). Identity can also be reinforced through relation to an aspect of the group's social and material life. For example, the Kuy in Strung Treng "drowned" in Khmer populations display their specificity less through language than through the *Katael* tradition, a combative game in which men confront each other with sticks and shields and which made them famous throughout Cambodia.

The richness and complexity of vernacular languages tend to fade among numerous young people living near the provincial capital. This is only a beginning, about which many older villagers spoke to us. Everything leads us to believe that the generalization of education in the Khmer language will only accentuate the phenomenon. This is of course an irreparable loss for the cultural heritage of the indigenous populations because it is through language that invaluable original and hardly translatable knowledge is transmitted (myths, old songs, taxonomy of plants and of the plant world, etc.). But although language is important, the loss or weakening of its use does not automatically mean loss of identity; for, as we just saw, identity is constantly reaffirmed according to new points of reference and evolves with the transformations that are occurring in society.

In sum, it seems inadequate to evoke, *for the moment*, the loss of identity and the acculturation of indigenous populations in north-eastern Cambodia. These populations verily exist, in the flesh, and despite common points with Khmer culture, they know how to maintain a specificity that is ceaselessly renewed. Of course, one will always find counter-examples of families who have chosen to integrate totally into the Khmer world, but then again, nothing is immutable. Let us mention the story of a Jorai family living near Banlung. The father, who had migrated to Banlung, had decided to no longer practice sacrifices and to no longer perform propitiatory ceremonies. However, one of his children decided to return to the village and to resume the tradition followed

by his grand-father in the past. We cannot help but thinking here of the famous law of the anthropologist Hansen: "What the son wants to forget, the grandson can remember".

Assimilation versus cultural pluralism

The integration of the Khmer Loeu into today's Cambodia remains to be done. Three alternatives can be envisaged to this end.

First, it is possible to create protected zones, as was done in regions in India and in the Amazon basin (southern Venezuela). This solution is both salutary and subject to criticism, inasmuch as it aims to isolate aboriginal groups under the pretext of preserving their cultural authenticity. Cutting people off in this way from any form of external intervention, and thus from progress, is rather pernicious because they are then condemned to become "museum pieces". It goes without saying that such an attitude is contrary to the wishes of the populations in Ratanakiri and Mondolkiri, who are inclined to benefit from certain aspects of modern life, quite apart from the fact that it is already too late because of the exponential settlement of lowland inhabitants and the will of the government to exploit natural and underground resources in both provinces.

Second, the idea of assimilation can be supported. Assimilation is a process that aims to absorb minority populations into the dominant population. It can be done to various degrees, more or less abruptly, but the objective remains the same; namely, to change lifestyles in their totality with a view to socio-cultural, religious, economic and political standardization in order to establish the country's unity. This argument is very debatable, but it hovers in the background of discourses incantationally asserting that indigenous groups must above all become good Khmer, even though they are encouraged at the same time to preserve their "folklore" (dances, songs, artisanal work), which is a likely source of attraction for tourists, and thus lucrative for the country.

The third solution, which seems to us to be the most apposite, is to construct a project of pluralistic society. A pluralistic society is one in which diversity is respected, even encouraged, within a national consensus. It is in no way opposed to the concept of unity, which it is supposed to strengthen insofar as every socio-cultural group that exhibits a specific knowledge is capable of contributing originally to the resolution of particular problems. For example, there is much to learn from the Tampuan, Jorai and Brao people about their specific way of using, managing and understanding natural ecosystems, about their apparently simple (but certainly very worthy of interest) building techniques. This solution is also the most difficult and the time-consuming to implement because it implies dialogue, consultation, knowledge of the others and recognition of their otherness, tolerance and the tangible will to share. It demands above all human qualities more than extravagant material investments. It is not a philosophic utopia if the benefits that both groups, majority and minority, can derive from such an experience are considered; conflicts ensuing of social injustice, domination and segre-

gation would then be reduced, not to say avoided for the major part. The situation of dependency and submission of indigenous populations in the north-eastern provinces has not yet reached a point of no-return and it is still possible to choose this path. However, we cannot help but be somewhat pessimistic when we see the intentions of a number of decision-makers and certain development actors looming on the horizon.

From the awarding of diplomas for good behavior to villages that quietly subscribed to policies of Khmerization [Jonsson 1992: 2], to massive land-selling adopted by high-ranking civil servants in Phnom Penh, by way of the fantasist judgments of certain promoters of a new way of life, we are entitled to wonder if what is called the development of indigenous populations is not a misunderstanding, a big farce at best, which marks the beginning of the enslavement of the Proto-Indo-Chinese societies. The manifest refusal to understand others according their own categories expresses the malaise and denial of modern societies - will Cambodia be an exception? – when it comes to forming a notion of the implementation of a genuine pluralistic society whose ethnic diversity would be a source of richness, multiple potentialities, hope and a proof of tolerance. Whoever has had the chance to come near these populations, to listen to their myths, to observe their courage and their way of working, to share moments of their life, their festivals, their joys and disappointments, can only depart from them enriched by new knowledge and by an undreamt-of vision of the world. In consequence, this attentive observer can only urge political leaders and initiators of a strictly economic development to nuance their positions, and invite them to listen to the messages these civilizations want to transmit. But this is perhaps the naïveté of an anthropologist.

Perspectives

The socio-economic development of Proto-Indo-Chinese populations is in an initial stage of vulnerability with regard to external influences. This vulnerability is linked not only with development policies that the government wants to carry out through the intensification of interactions with lowland people, but above all with the uncontrolled intrusion - which is only starting - of foreign and national private companies that are attempting to appropriate forest territory. What is more, the use of villages as tourist attractions calls for reflection and caution, when the damage caused by “tribal” tourism in Thailand and other countries in Asia is there for all to see.

Agricultural practices must inevitably change with the agreement of local populations. At present, the government considers rubber plantations, cashew nut, coffee, black pepper, mixed vegetable farming and animal husbandry. But now, there is no fertilizer, no tools or technical training, no selection of cattle or goats to improve breeding. On the other hand, foreign companies (Indonesia, Malaysia, Taiwan, Japan, and South Korea) come regularly to open negotiations, in particular for planting oil palm, the intensive cultivation of which in the highlands is far from being recognized as viable by agronomists. Although nothing has as yet begun in Mondolkiri, this is not the case in Ratanakiri, where the first factory opened in early 1995. There would have been, since October 1995, more than 60,000 hectares of wooded zones granted to ten or so companies proposing plans for forest management and conversion to cash crops, not to mention the 1.5 million hectares in the north-east that have been granted to Indonesia. It is clear that the Proto-Indo-Chinese people, living on basalt land which is among the richest in Cambodia, represent an obstacle for these companies, for government figures and ministries endeavoring to develop their country, which is still depleted and hardly out of the war, by trying to attract foreign currencies to the country as quickly as possible. This means of course forgetting that ultimately this kind of development is not “sustainable” and that nothing guarantees that foreign (or national) investors will respect the contractual stipulations, as past experiences in other places in the world show (Surinam, East Timor, Thailand, India, etc.).

As long as there is still time, two conditions are indispensable to ensure protection and respect of the Proto-Indo-Chinese identity. On the legislative level, there must be recognition of their Cambodian citizenship[56] and then of their land rights, recognition of their property titles, which constitute the basis of any other action. Without these basic rights, any development project is like a bottomless pit and the risk is great that it will be of no purpose. Second, it is necessary to allow populations to participate in their own future and let them decide in the last instance. Four decades of development in countries of the South show that any action conducted under constraint is bound to fail, often irremediably for both parties (developing and developed). Any external intervention on the part of the government can only have a consultative function, otherwise it would mean repeating a pro-colonial attitude, which the government is the first to question when it wants, justifiably so, to claim the country's sovereignty respective of foreign powers. For their part, indigenous populations must modify their cultural practices, reduce their ground-clearing area and adapt themselves to a new environment; but, they must also be aware of what they risk in one case as in another. The social, economic and cultural costs that accompany changes must be clearly evaluated before, and not after, the development process has begun. It is essentially through knowledge and mutual understanding that it will be possible to prepare the ground for a harmonious development to improve the quality of inter-ethnic relations.

Notes

1 In the following text, they are called aborigine, autochthonous, Proto-Indo-Chinese [Condominas and Haudricourt 1952], and highlanders or Khmer Loeu (Sihanouk 1960), inasmuch as most of these populations accept this appellation. Conversely, the terms “minorities", "tribes” and a fortiori “primitives” will be avoided, given their inadequate or pejorative connotations that are likely to lead to confusion.

2 Memories revived from the Sangkum era and then "more subjectively" reinforced by the Khmer Rouge. The thesis of geographic isolation was advanced to justify the social and cultural isolation of north-eastern highland populations. But many historical facts and ethno-historical data show that highlanders were never cut off from the low lands and neighboring countries.
3 These legends transmitted by Cambodians are still very much alive today. They refer to sacred places (Preah Thom, etc.), the descriptions of which are included in the myths of the local populations.
4 Animals are used as metaphors (perhaps for humans, but different from their people) and they are said to be responsible for what happened to humans.
5 According to testimonies gathered from ethnic groups in Ratanakiri who live on the banks of the Sesan.
6 Lun people, for example, live in the biotope neighboring the Sesan in Stung Treng and Ratanakiri.
7 This classification refers to latitude, whereas they actually live at a higher altitude.
8 In Kachirom and Olan villages near Kratie, people told us that they were called Kuy two generations earlier, then Khmer-Kuy one generation later and Khmer today.
9 In the 1950s, Bitard observed that Laotians had a tendency to settle near aboriginal populations, and even in Brao and Kreung villages. Also, it is not rare to meet, in 1995, Laotian kru (healers) initiated into their art in provincial pagodas and who settle in Jorai and Tampuan villages.
10 The existence in Brao and Kreung villages of small private huts where young girls go and sleep alone, like the communal or individual huts for Tampuan boys, fosters rumors among the Khmers about moral licentiousness, although this is not at all the case. These small houses are located near those of the parents, who scrupulously control their children's behavior and do not authorize any intrusion except for the officially accepted partner, recognized as fiancé and therefore future husband.
11 The Hmong have the highest rate – 4.3% - but are far from representing a typical case, inasmuch as other rates vary : 3.5% for Mien ; 3.1% for Akha ; 2.7% for Kamu ; 2.5% for Lua ; 1.9% for Karen (who represent half of the total aboriginal population) and 1.1% for Htin. In total, and until the contrary is proved, a percentage of 3% of natural increase for highland tribes in Thailand seems realistic. Data quoted by McKinnon, Structural Assimilation and the Consensus; Creating grounds on which to rearrange our thoughts, p. 311.
12 The global density rate leads to error because more than half of the territory is uninhabited, which reduces to 11 persons./km2 the occupation density of a space including the narrow river biotope and the central low-altitude zone. This rate must be considered according to local ecological characteristics since indigenous populations consider many portions of territory as improper for settlement: clear forest and savannah zones, sacred places inhabited by forest spirits, location of old cemeteries, etc. Despite the importance of local variations, the density rate in Ratanakiri is clearly higher than the demographic density of Amazonian forest gardners, ranging from 0.17 to 3 inhabitants/km2. It is lower than the over-populated provinces in central Vietnam and the highlands in northern Thailand – the Chiang Mai region –, the critical and, as is admitted by a number of authors, optimistic threshold of 50 inhabitants/km2 for ground-clearing societies is frequently exceeded. However it is very similar to the population density in the Boloven plateaus in Laos, where rich ferralitic land, as in Ratanakiri, allows of concentrations up to 16 inhabitants/km2 (against less than 10 inhabitants/km2 on other woody highlands in south Laos).
13 Even though many villages have their freshly cleared grounds on high-sloped land, a clear preference is given to low-sloped land.
14 The eighteen "Tampuan highland" and "Jorai highland" appellations mentioned by Maître (1912) do not correspond (or no longer do) to the autochthonous point of view.
15 Claude Levi-Strauss showed in this regard how missionaries in Latin America consciously provoked changes in village territorial structures to modify internal social structures and cosmogonic representations of indigenous populations in order to open them up to evangelization and "modernization" processes. It seems that a similar strategy is being implemented, under the cover of development and regionalization, in Ratanakiri.
16 The village is the highest political unit.
17 The World Bank considered in 1995 participating in the building of a road network in the province. This would mean disregarding the consequences of a foreign acquisition of land traditionally used by Proto-Indo-Chinese populations.
18 In the traditional perception (which is somewhat confused on this subject), land belongs to forest spirits and not to men.
19 The image of a region where groups constantly and chaotically roam around in the forest - the men in the front carrying light material possessions, followed by women dragging children in rags and pigs, buffaloes and chicken - is only the product of an unfortunately well-anchored imagination.
20 It is not so for ground-clearers. Boulbet noticed in southern Vietnam the existence of nomadic tribes, the Cils (Phnong subgroup) who cleared one patch of primary forest every year to cultivate their gardens in zones of the high plateaus that were usually exempt from any human activity by other Proto-Indo-Chinese (Boulbet 1975).
21 Hunter-gatherers still exist in Malaysia (Orang-Asia in the center of the main island), or in Thailand ("spirits of the yellow leaves"), but not in the north-eastern regions of Cambodia.
22 Phum Chorn, where we spent several months in 1994-95, has been settled on the same site since 1979. Inhabitants have absolutely no intention to move their houses. Before the 1970s, the village was located only ten or so kilometers from the current one and was supposed to remain so for more than twenty years.
23 One myth/story tells how they built a wall and stuck sugar on it to attract Kraol into a hole and "tame" them.
24 Elements of the plant world, rice in particular, have a soul.

25 We personally attended a ceremony that lasted for a week in a Tampuan village in 1995.
26 For example, rainfall depends primarily on human behavior, inasmuch as the drunkenness characterizing large festivals is supposed to bring monsoon rains.
27 Currently, we note in some places a weakening of ritual practices, for example among Brao in Phum Kato, twenty kilometers from the Stung Treng capital, where animals are no longer killed during ceremonies and where the latter are losing their main function.
28 There are authorized, favored and strictly forbidden alliances (for example, any relation within the same clan among the Jorai, Kachah and Tampuan is considered to be an incestuous act and represents the most serious provocation of societal authority).
29 This does not mean that Proto-Indo-Chinese have, scientifically speaking, an ecological behavior, all the less so as some attitudes go against a harmonious vision of man and his natural environment. This is the case for a Brao man in Ta Veng who dreamed of a tree near his house and felled it the next day in order to dislodge the bad spirit that brought on his child's illness.
30 For example, among the Tampuans in Phum Chorn, one person stole nine chickens and the elders punished him with a fine of 70,000 riels, ten jars of rice beer and eleven chickens. Stealing rice from a loft in a chamcar is viewed as an inconceivable act and is more harshly punished.
31 For further details, see Bourdier 1995b.
32 The geographer Pierre Gourou spoke justly of "a plant civilization" of highlanders in South-East Asia.
33 Since the Khmer Rouge, this knowledge has unfortunately diminished to such a point that it is on the verge of disappearing.
34 In Ta Veng, every man in a Brao village who undertook to resist the appeals of Khmer Rouge soldiers was killed. In one Kraveth village, half of the families were assassinated. This kind of example is frequent.
35 We were told that the place was chosen by scouts who knew the paths. Jorai in Vietnam who traded around Ta Veng would have facilitated the escape of some villages.
36 It does not seem that this system ever functioned in Ratanakiri. There is at least no trace of it in people's memory.
37 Brao inhabitants in Phum Kapang remember when they were forced to come back in 1983 after a long trek from north to south that lasted twenty-nine days.
38 It is said in Ratanakiri that during a Phnong insurrection in 1914-16, one of the major reasons for their abdication was linked with a salt shortage, the trade in which had suddenly stopped because of insecurity on the roads. Rebel leaders agreed to negotiate with the French when salt deliveries started again.
39 One food shortage followed because populations had sold too much and did not foresee anything for the next year, which was a bad year because of flooding.
40 That is why the word "tribe" is, as we understand it, improper as a name for populations in Ratanakiri.
41 Road maintenance, public building, etc.

42 At the end of 1994, indigenous soldiers from Ratanakiri were sent to fight against Khmer Rouge in Preah Vihear.
43 Under Heng Samrin, soldiers received in addition twenty kg of rice per couple and ten kg per child.
44 In this case, they propose cheaper prices than "official" private negotiators.
45 Disease is often seen as a symptom of a deeper cause: non-respect of an interdiction, violation of a taboo, etc. For further details, see White 1995.
46 Small shops in provincial and district capitals sell medicines at a price that is two to four times more expansive than in Phnom Penh.
47 With some caution however: not sending all the boys so that some can continue to help their parents in the field and not insisting on modern education for girls, the immediate benefit of which is not perceived.
48 An act that is never without symbolic-religious consequences, since fermented beverages are always a gift for divinities.
49 There are Khmers and Laotians who have lived in the region for a long time and who happen to be experts in ethnic groups with whom they are in constant relations.
50 For further development, see Escoffier's work on the Laotian population.
51 As long as the couple settles in the original village of one of them, the other must fulfill obligations falling to every man or woman in that society. This implies privileged relations of cooperation and mutual help within the family, socio-economic relations within the alliance network, participation in collective ceremonies and the duty to perform agricultural rites and those conducted to appease house and village spirits.
52 The distribution of clothes to Khmer Loeu was one of the first actions carried out by the royal government representatives.
53 Domestic animals are traditionally consumed only during ceremonies or on important occasions.
54 Not all of them however. The traditional hairstyle is a chignon and the wearing of sarongs by men is restricted to certain individuals and more generally within the village territory.
55 Men with magico-religious powers whose charisma is not questioned. Some to the north of the Sesan River gained notoriety which spread over a vast region.
56 At present (January 1996), it is in the draft stage. Recently, the Council of Ministers urged the Chamber of Deputies to examine the law on citizenship.

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CHAPTER 6

From the Sesan to the Srae Pok Rivers: Roots and Destiny of the Indigenous Populations in North-East Cambodia (Ratanakiri and Mondolkiri)

You, Barang, you are like a bird that flies from village to village and then flies off to its country. (a Kraveth woman)

In the following paper, I will approach a cultural world that is not that of Buddhism or epigraphs, nor that of the ancient Khmer literature or of the Cambodian peasant in the plains as described by Jean Delvert,[1] but the world of the forest dwellers. I will rely on my own research experience in Ratanakiri and Mondolkiri in 1994 and 1995, and I will also attempt to take stock of the studies on the indigenous populations of these regions, which remain relatively unknown to most of the Khmers and perhaps even to a certain number of researchers specialized in South-East Asia.

Before reviewing some of the facts and problems that seem to me to be particularly important for an introduction into the knowledge of ethnic groups in Cambodia, it will be expedient to very generally describe the actual situation, but above all to propose a manner of perceiving the phenomenon of multi-ethnicity that will allow us, all things considered, to better understand these populations in their economic, social and geographic foundations. I will mainly concentrate my exposition on the two north-eastern provinces, given the lack of crucial information concerning the ethnic groups of the region of Pursat and of the other provinces in the west and south of the country, which, for reasons of politics and security, remain hardly accessible and thus difficult to study.

General characteristics of the populations in the north-east

At the outset, a question of terminology must be clarified. The ethnic groups traditionally populating the forests of Ratanakiri and Mondolkiri derive from the same cultural substratum that Condominas and Haudricourt have named "Proto-Indo-Chinese"[2] (a term that is challenged today, but it is not my intention to enter into this stormy debate) and that is found again in Vietnam and southern Laos. In distinction to the deprecating terms formerly used by explorers, travelers and the first researchers, such as *moï* (savage), *kha* (slave), *phnong* (mountain dweller) and yet another series of terms, which in my understanding is too subjective or inexact, such as "primitives", *Khmer Loeu* (the highland Khmers), tribal or ethnic minorities (whereas they are in the majority in the vast regions constituting their ancestral territories), the word Proto-Indo-Chinese designates more objectively a group of populations whose way of life represents the oldest and technically least developed stage in the region of continental South-East Asia, without however signifying a lack of elaborate social and cultural institutions. The word "highlander" employed in English literature specifies the geographic position

generally occupied by these groups, but unfortunately has no equivalent in French, and the Khmer translation of the term mountain dweller – apart from the fact that there are no mountains in the inhabited regions of the north-east – is tainted by a pejorative meaning absent in both English and French. For the sake of convenience, it is however possible to accept expressions such as indigenous populations, autochthonous groups and *choonchiet*,[3] if one wishes to use the local terminology adopted and employed by all the ethnic groups to refer to themselves collectively, in distinction to the Laotians and the Khmers who come to settle in the region.

A detailed census of the different groups on the national level has yet to be carried out. Most of the provinces presently give numerical estimates that are, all things considered, random, not only as regards the counting, but as regards the terminology employed.[4] The Ministry of Home Affairs provided in 1995 a list of fifteen indigenous groups and added the category "other" comprising 3,700 persons, the Ministry of Religious Affairs counted thirty-three groups in 1992, while the Ministry of Planning identified more than twenty groups in 1981. According to my own census in 1994 in the provinces of the north-east of the country, there would be eleven Proto-Indo-Chinese groups, of which eight are represented in Ratanakiri and Mondolkiri, representing a total of at least 75,000 indigenous persons in these two provinces. Other groups who lived in the massifs in the extreme north-east some thirty years ago left the territory at the time of the American bombings and later during the advance of the Khmer Rouge and fled either to Vietnam – this is the case of the Kayang – or to Laos – this is the case of the Kanieng. Moreover, if one goes farther back into the past (to the beginning of the century), the Halang would have lived along the upper river and were then driven out by other groups to the "tail of the dragon", before definitively migrating farther east to Vietnam in the early 1960s.

The most numerous groups are the Mnong – commonly called Phnong today – in Mondolkiri, with 19 ,000 members, and the Tampuan (18,000), the Jorai (14,000) and the Kreung (14,000) in Ratanakiri, to which should be added the Kuy (14,200) in the west of Stung Treng province. Then come the Brao in central-west Ratanakiri (5,500), the Kraveth distributed between Stung Treng and Ratanakiri (4,000), the Stieng in the south-west of Mondolkiri and in Kratie (3,200), the Kachah in Ratanakiri (2,200), the Kraol in northern Mondolkiri and in Kratie (1,960), the Lun who live along the Sesan River (300) and the Rohong (?). According to various unverified sources, let us note, apart from the two aforementioned provinces, the Mel in Kratie (2,100), the Pear and the Samre in the western provinces (1,500), the Saoch in Kampot (175), the Suoy in Kompong Speu (1,200), the Robel (1,640) and an entire series of other groups, sometimes not localized, sometimes not counted, sometimes inadequately identified, whose existence as particular groups remains to be shown (the Prov, the Thmau, the Kola, the Poang, the Kaning, the Anang, the Sispre, the Thnal, etc.).

The spatial distribution of the indigenous groups is far from homogeneous. In Ratanakiri, the central plateau, called the Tampuan plateau, which corresponds to an interfluve with basaltic soils, is the most populated zone. This is not surprising because the ecosystem here is very heterogeneous, heavily wooded and has the most fertile soils. Conversely, the zones of sparsely wooded forest are entirely uninhabited and unexploited, or were in any case until a recent period when rice cultivation was adopted by some indigenous villages. The biotopes of the Sesan and the northern Srae Pok Rivers are favored more by the Laotians (for fishing) and the Chinese (for trade) than by the indigenous peoples, with the exception of the Kachah, who have developed irrigated rice cultivation for more than fifty years, and the Lun, one of the rare indigenous groups to practice fishing on the large northern river. Apart from these two fluvial borders, human habitation is negligible: the southern Srae Pok, which Henri Maître called "the sparsely-wooded desert", is practically uninhabited. As for the northern Sesan, where the altitude gradually reaches as much as 1,600 meters as one approaches from the Laotian border, only the Kraveth and a few Brao hamlets are found, scattered mostly on the banks of small rivers, tributaries of the Sesan. The northern part of Ratanakiri was more populated prior to the Sangkum period, in particular by the Brao and perhaps by the Lun, whose villages were located at several days' trek through the dense forest, before they were relocated by the Khmer government in the 1960s to the banks of the river. However, there should be no misunderstanding as to the new appearance of spatial distribution between the interfluve and the fluvial ecosystem: the villages are located near the rivers, but the slash-and-burn fields, where the majority of the inhabitants live between six and eight months of the year, are still located in the wooded hills at a distance of several hours' march, up to ten kilometers. A map showing the localization of villages, some of which only potentially exist, would not correspond to the exact distribution of human density.

Generally speaking, the villages, which are distant from each other, are almost never located alongside roads; a settlement surrounded by high forest and protected from all human activity is clearly preferred. The classical configuration of the village area in Ratanakiri is thus a grouping of houses situated in a vast forest zone with regulated, sacred spaces where the felling of trees is prohibited, and other spaces that can be exploited for a limited period, provided that certain rituals are carried out. The spatial arrangement varies somewhat in Mondolkiri. The villages are sometimes "ruralized" in the districts in the east and north, sometimes scattered according to group (an influence of the *Krom Samaki* from the Vietnamese period), and the freshly cleared grounds are established on the dense slopes of hills and in thalwegs, which are the only places in the central region around Sen Monorom where dense forests grow.

The Proto-Indo-Chinese display a remarkable linguistic diversity in a relatively limited space. In Cambodia, one finds ethnic groups belonging to the Austro-Asiatic (or

Mon-Khmer) family, such as the Brao, Tampuan, Stieng, Mnong, and the Austronesian (or Malayo-Polynesian) family, such as the Jorai and the Radhe. In the Mon-Khmer family, several linguistic groups and subgroups can be distinguished. Most of them were recently identified by Georges Diffloth.[5] Accordingly, the Brao, the Kraveth, the Kreung, to which I would add the Lun, belong to the same group and speak similar languages. Be that as it may, multilingualism is common in the Proto-Indo-Chinese societies and most of the individuals in an ethnic group speak two, three or several vernacular languages, some of which have little in common, like the Kreung and the Jorai. This polyglot ability, unquestionably linked to geographic proximity, is reinforced by the long-standing contacts with the Khmers and above all with the Laotians, the frequency of inter-ethnic relations due to the intensity of commercial exchange, marital alliances and by the recent historical situation, inasmuch as during the Khmer Rouge period the villages were regrouped and marriage between individuals of different ethnic groups was systematically advocated.

Very schematically, what characterizes the lifestyle of the forest dwellers, compared to the Cambodian populations in the plains, is a socio-political organization that rests on the village, the size of which varies from 50 to 400 inhabitants (for an average of 250 persons), primarily itinerant cultivation practices circumscribed in a territory in which rice is the main crop,[6] numerous predatory activities (hunting, fishing, gathering), together with a remarkable knowledge of the natural milieu and a mixed settlement. The latter includes, on the one hand, the village in round or square arrangement, where the villagers live only a few months of the year between two agricultural cycles (from December to March); and, on the other hand, the individual bamboo house in the center of the freshly cleared ground, which is in fact the main dwelling during work in the fields. Often more beautifully crafted and better maintained than the village house, it is where the family stores the successive harvests of the different rice varieties. However, the specificity of these populations resides in the privileged relation they have with their ecological environment. The innumerable modes of acquisition of the plant and animal world and the ensuing technical knowledge enable them to be autonomous (apart from salt), even if manufactured products are increasingly penetrating the villages (clothes, tobacco, new kinds of food, etc.).

Rather than relying on an anthropological definition that is in the end abstract, it is interesting look into the manner in which, for example, a Tampuan perceives himself and acts so as to validate his "Tampuanness". In this case the main facts observed or mentioned by them are: a kinship network that extends beyond the village and on which one can count in difficult times (illness, extra work, bad harvest, conflicts with foreigners), an ability to do everything oneself (there are no specialists apart from blacksmiths and shamans), a refusal by most men and women to consider wage labor with restricting hours, a freedom to organize one's work, a shared will to live together,

a profound sense of festivity that is experienced at numerous religious ceremonies, during which rice beer flows copiously for long hours.

But what exactly is known about these populations? Scientific studies carried out among the forest dwellers in Cambodia are, in fact, extremely rare. Some moments in the history of these communities will remain unknown, apart from a little ersatz information scattered here and there in accounts of travelers seeking the unusual, and in reports of administrators and descriptions by colonists. The Proto-Indo-Chinese in Cambodia cut a figure of poor relations in distinction to the indigenous populations of Vietnam studied by Western ethnologists, of whom we cannot give here an exhaustive list, but we will mention Jacques Dournes (Jorai, Maa), Georges Condominas (Mnong Gar), Pierre Guilleminet (Bahnar, Sedang, Jorai) Father J. Kemlin (Bahnar, Rengao), B.Y. Jouin (Jorai, Rhade) and the historian Gerald Hickey. There is, first, the pioneering work of Henri Maître at the beginning of the last century. Sent by the colonial government, he was the first to attempt a systematic study of the populations of "the moï hinterland" and of the local geography, but his tragic death in Mondolkiri in 1915 put an abrupt end to his investigations. Then, apart the works of Jean Boulbet around Phnom Kulen and in Mondolkiri on the different forms in which the Proto-Indo-Chinese develop space, the works of Jacqueline Matras-Troubetzkoy, who is the first before the 1960s to have written a genuine monograph and to have studied over a long period the ways of life and the cultural practices in a Brao village, and finally those of Morizon, René Baradat and Marie-Alexandre Martin among the Pear-Samre, there are no other principal works that are more than merely descriptive. The latter are interesting but often too brief and scattered, found in the travel diaries – more numerous this time – of adventurers, journalists and explorers (J. Taupin, André Baudenne, J.H. Hoffet, Dr Harmand), of colonial civil servants (Colonel Cupet, Pierre Bitard) and writers (André Malraux). Other specialist authors on Cambodia or more extensive regions have also carried out valuable research on the indigenous populations and on their relations with the dominant populations (Khmers, Thais, Laotians, Vietnamese);for example, Adhémar Leclère in his monograph on the province of Kratie and in his studies on the Mnong and the Moura in his book on the kingdom of Cambodia, or Henri Mouhot, who crossed the central regions of Indochina several times.

Following twenty-five years of complete scientific void for well-known political reasons, research timidly began again with Joanna White, who works on health problems and on customary rights, Sri Redjeki Sugiarti, who examines gender relations, and myself, having recently begun research on the relations between social and natural ecosystems and on questions of identity and ethnicity. A knowledge of the works on the Proto-Indo-Chinese in Vietnam and Laos can of course help in understanding the Proto-Indo-Chinese in Cambodia. On the one hand, some groups are the same (although their histories diverge at a given point); and, on the other hand, as I have

already mentioned, the same cultural substratum exists.

At the same time, a new type of research-cum-action is being put in place. It consists in short missions sponsored by development bodies, which continue to increase in Ratanakiri. This is perhaps useful, and better than nothing, although if one examines more closely the conditions in which these missions are carried out, the manner in which the experts-cum-researchers are limited in terms of time and the way they are ideologically and financially linked, doubt is justified. It is not a question, for example, of disclaiming fundamental research that lacks utilitarian character, in the name of the urgency and precariousness of the ecological future of the provinces in the north-east. It is, I think, with fundamental research that one should begin, in order to know on what basis the findings and recommendations of the activists repose. Still more insidious, experiences regarding the application of research to development in neighboring countries give matter for thought regarding the projects that are being planned in Cambodia. This practice is justifiable, but only up to a certain point; it is obvious that history is not repeated in the same manner and environmental, political, social, economic and cultural data always vary. It is also hazardous, but nevertheless done by certain international organizations, to want to derive lessons from research conducted in other geographic locations and in other socio-cultural contexts *before* initiating genuine research where the project is to be implemented. I would like to point out in passing that responsible persons from international organizations, who work paradoxically in closed circles, organize meetings with experts and researchers of other international institutions working in South-East Asia, most particularly in Thailand, without approaching or inviting, as in the case of Ratanakiri in early 1996, the rare researchers in the province with experience in the field. A division is thus being produced between two forms of research, which however deal with the same subject. It is for us to create meeting places.

Finally, everything or almost everything remains to be done in the area of research on the Proto-Indo-Chinese populations in Cambodia. Initial work has begun but, at the rate at which the indigenous societies are undergoing change, a void in knowledge is felt. Specialists in ancient texts can contribute to this work, but testimonies evoked by the royal chronicles are rare, and few and far between are passages in Khmer literature that explore these regions, apart from the Annals in which the hinterland of hills and forests was mainly described as a potential source of workers and slaves, for which it was necessary to specify the terms of the trafficking.

Fluctuation and emergence of the groups

I would like to return to a point that seems to me to be crucial, that of the definition of ethnicity among the Proto-Indo-Chinese. It is obvious that the evocation of a cultural homogeneity does not mean an absence of difference and identities. In the same way that identities specific to Ratanakiri and to Mondolkiri remain, in the absence of systematically contrasted cultural features – one finds in fact more similarities in the institutions than distinctions -, ethnic diversity is observed to persist, notwithstanding permanent and constantly renewed contacts. To give a very simple example on the level of material culture: an ethnic group will master the weaving of a type of blanket, produce a kind of basket or will use a tool with a particular form and employ this as an *identity marker* to differentiate itself from another group, the crafts of which will be characterized by different objects. This diversity, which of course extends to areas other than the material, only acquires its meaning in an extensive area of cultural and linguistic homogeneity that goes beyond the borders of the two provinces. In other words, to identify a group, it must be viewed as belonging to a larger system including neighboring groups and their homologues from which it is arbitrarily separated by an administrative boundary. The Jorai in Ratanakiri have links (social, economic, etc.) with the Jorai in Pleiku in Vietnam, and it is impossible to understand the economic transformations of the Mnong society in southern Mondolkiri without referring to their fellow Mnong on the other side of the border. What is more, faced with the interpenetration and interdependence of the ethnic groups – indigenous populations, Laotians, Khmers, Chinese, Vietnamese -, membership in a group cannot be understood and analyzed without showing the contrast between the encounter of a society conventionally, and unsatisfactorily, called "tribal" and a society considered to be more "civilized". This latter point merits further attention, because I think that the manner in which the autochthonous populations are traditionally perceived, that is, as groups that can easily be classified on the basis of original, eccentric, anecdotic or folkloric traits, represents a way of seeing the others as "the savage". This perception is extremely deep-rooted among the Khmers, the political decision-makers of the country, and administrators in the north-eastern provinces and sometimes even among researchers in search of ethnic classification. This fictitious representation, other than perhaps leading the research into an impasse by circumscribing it with simple taxonomic descriptions, gives rise to more misunderstandings, cleavages and forms of discrimination than it offers possibilities for meeting and understanding between the lowland and highland populations in Cambodia.

My hypothesis is that, if one wants to succinctly define what can justifiably be called the Proto-Indo-Chinese civilization,[7] it is easier and perhaps more sensible to do this in terms of opposition, or more precisely, in relation to the surrounding Khmer, Laotian and Vietnamese populations, rather than defining it from within. There is not a single group, not a single village, however remote it may be, that is not subject to direct or indirect influence by the civilization in the plains. It is of course permissible, and entirely pertinent, to characterize the indigenous societies in Ratanakiri as stateless societies, if one wishes to make politics the basis of the classification of societies, as Pierre Clastres does,[8] or to define them as self-subsisting societies, if the accent is placed on

the mode of economic production, as in the works of Marshall Salhins.[9] However, a key that opens all doors is an imperfect key. These concepts are entirely valid but, in my understanding, remain selective, static and reductive inasmuch as, starting from an inescapable fact at a given moment in a past history, they implicitly postulate a determinism, either cultural, economic or political, as the basis of social organization and of its relations to the surrounding milieu, rather than considering these factors as simple and interdependent co-determinants with synergetic effects, the respective weights of which are not immutable. It would also be possible, as ethnologists have often done in Africa, Thailand and Vietnam, to accentuate certain recurrent socio-cultural characteristics that are found here and there in the upper plateaus and forests of Cambodia, and then underscore the differences and the specificities of each group. We are, in fact, in the presence of populations that are scattered in outlying zones of the country, societies without a script[10] and that have a matrilineal line of descent, the federative organization of which does not exceed that of the village and whose dispersed settlement is nearly sedentary. These populations practice pluvial rice cultivation on slash-and-burn fields and have a particular form of religion based on the worship of forest spirits and ancestors, while at the same time recognizing the existence of a unique god-creator, the culminating point of which is the buffalo sacrifice. One could list countless singularities that offer an exotic view, not devoid of reality, of the Proto-Indo-Chinese societies.

However, while these facts are in a sense true, they must be nuanced to account for the changes that are taking place. These populations live, evolve, transform and modify themselves, exchange and borrow not only among themselves but also with migrants from the plains who settle in increasing numbers on the fertile soils of the upper plateaus. It is more than 200 years since waves of Laotians settled in the region, whether for the rudimentary exploitation of the zircon mines, in search of gold, or to establish themselves on the river banks to practice rice cultivation. In some places (Andoung Meas, Lumpath), the Laotians, and to a lesser extent the Khmers, mixed with the local populations, took indigenous wives and built a new society that proved to be an aggregate of their Lao culture and the local culture. There is therefore a complete dynamic and active dimension that should be underscored and that refutes the commonplace idea that the representatives of so-called "primitive" societies form immutable, timeless groups that can be characterized by a set of clearly identifiable cultural traits that would be transmitted as they are from generation to generation. Quite on the contrary, we are faced with societies that in the process of constant renewal or restructuring, under the influence of new development policies and recent agricultural practices that come with a progressive shift towards a market economy. None of the indigenous populations lives – or has lived in the past – in geographic and social isolation. All are linked with the others to various degrees (economically, politically, socio-culturally), but also with the lowland civilizations surrounding them.

The north-east provinces have never been an ecologically impenetrable and inaccessible area. Quite on the contrary, archaeological vestiges near Veun Sai in northern Ratanakiri show that the region was a zone of temporary withdrawal for the Cham. The control of the fluvial transport routes was later assumed by the Khmers and then the Laotians after the fifteenth century. Trade relations also developed very early: beginning in the seventeenth century, travelers like the Dutchman G.V. Wuisthoff record economic activities between the towns on the banks of the Mekong (the present Stung Treng, Kratie, etc.) and the inhabitants in the interior.[11] The Khmers bartered salt and iron for gold, wild animals, resins, hides, horns, waxes, gums and ivory from the forest. Hunting down slaves was one of the main lucrative activities that already existed at the time of the construction of Angkor (because the indigenous populations provided numerous workers) and that would continue until the beginning of the twentieth century. The slave trade of the indigenous peoples carried out by the Khmers, the Laotians and then the Thais, with the complicity of the most belligerent groups like the Jorai and the Stieng, became more pronounced towards the fifteenth century, when the Laos took possession of the north-east regions, and reached its zenith under Siamese domination, when traffickers and mercenaries profited from the prevailing anarchic conditions to develop their trade. Henri Maître describes this condition of endemic guerrilla warfare between the Sesan and the Srae Pok and does not hesitate to say that the region of the Brao and the Tampuan was systematically devastated by the slave trade: "Tracked down like wild beasts, they did not dare to leave their villages or their forests".[12] The Mnong in Mondolkiri remember the Jorai incursions and the bloody battles that opposed them for several decades. Nevertheless, trade in humans was not the only objective of the relations between the migrants from the plains and the Proto-Indo-Chinese. More peaceful exchanges were established with the villages located in the deep forests, the inhabitants of which were better able than anyone else to recognize and manage the animal and plant resources of their ecosystem.

On the other side of the country a different type of relation was established and, until the eighteenth century, strategic alliances succeeded each other between the Samre, the Kuy, the Pear and the Cambodian princes. The latter used the indigenous people as mercenary soldiers in their internecine war for power. On the other hand, the numerous indigenous populations paid tributes to the Cambodian monarchs: thus, the Pear had to provide a certain quantity of cardamom and other foodstuffs every year to the kings of Angkor, while the Jorai *Sadet* continued to provide elephants and valuable products to the court in Phnom Penh until the mid-nineteenth century.[13] The indigenous populations have however never wanted to be assimilated into the kingdom. In the east, several Stieng, Mnong and Kuy rebellions broke out against monarchic order in the nineteenth century, well before French colonization. There is thus over the course of the eventful history of the forest dwellers an entire social dynamics showing that the

groups had turbulent, friendly, suspicious, interested and disinterested contacts at regular intervals for more or less long periods and for very diverse reasons (political, social, economic, etc.). In this context, it must be recognized that the ethnic identity among the Proto-Indo-Chinese is something that changes, resulting from the action and interaction among the groups in a social organization in which the balance is continually called into question.

It is also tempting to evoke – and I admit to having been the first victim after have lived several months in a Tampuan village in Ratanakiri – the balance, harmony and solidarity that appear to prevail when one witnesses and participates "affectively" in the daily life of the villagers. The ethnologist who arrives in the field with a bag of ideologies, dreams and imagination, must not only abandon this tempting outlook, but must also be conscious that in discovering the fascinating mosaic of little known peoples, he has a snapshot image of a situation at a specifically given time that can lead him to forget that in the past the groups that he distinguishes and observes in front of him, distributed in a particular manner over a defined territory, have moved, united, differed, separated, found themselves again, fought, fraternized, etc. We will return later to this point, but it is useful to recall that even on the village level, if one succeeds in tracing the history and the genealogies, one realizes numerous scissions, inter- and intra-familial conflicts that sometimes result in grave occurrences (massacres, vendettas, banishments, the exodus of a phratry, etc.). It must therefore be observed that the apparently most remote ethnic groups are by no means isolated entities, but groups that belong to a composite population manifesting around singularities as well as variations and having a tumultuous history. Thus, the ethnic diversity in the north-east of the country persists in spite of contacts, and it can even be said that the rapprochements between the groups are the very condition of the perpetuation of this diversity.

In short, the ethnic group would no longer be defined by itself, but presents itself as a category of human group confronted with multifarious and inter-cultural situations. On the theoretical level this implies shifting – or at least going beyond – the analysis of intrinsic content towards the analysis of ethnic categories that emerge through relations between different groups. It is not a question of eliminating what constitutes the substance of a particular culture, but of taking into account the importance of exchanges and of reciprocal contributions between the confronting groups. It is a remarkable fact that the importance of this concept of ethnic boundary and of inter-relations between groups is empirically seen when members of an ethnic group are asked how they define themselves, for the individuals seldom fail to mention their identity in terms of what their neighbors have in common with them, or on the contrary, do not.

The legacy of the recent past and history re-invented

So as to illustrate this non-classificatory, flexible approach that endeavors to perceive the interface, the meeting points between the different societies, I will succinctly consider the recent past of the relations between the indigenous groups in the north-east and the people from the plains by evoking the manner in which these relations have been locally experienced and interpreted. A brief retrospective of the oral literature will serve to illustrate this cultural interpenetration.

Although it was previously said that the relations between the Khmers and Laotians with the ethnic groups in Ratanakiri and Mondolkiri are very old, a new type of relation was gradually established from the period of French colonization in the second half of the twentieth century, a time when the first roads were traced and the first agricultural developments implemented (hevea, coffee and pine plantations). The local populations were subjected, by force if need be, to the most laborious tasks. A number of violent resistance movements against the French administration and its local allies emerged in Mondolkiri at the beginning of the last century, particularly among the Mnong, whose insurrection ended when the French boycotted the salt trade. However, a few groups such as the Stieng, a few Jorai and a few Mnong fiercely refused any interference in their territory and were stigmatized as rebellious peoples with a bellicose temper until the final abdication in 1938. History once again accelerated in the 1960s. The decisive, not to say fatal turn, in a long-term perspective, began in the Sihanouk period when, following the formation of the two provinces of Ratanakiri in 1959 and Mondolkiri in 1960, it was decided to civilize "the miserable savages" and to promote economic development so as to integrate the region into the processes of national development. Some texts from this period illustrating tomorrow's new generation of Proto-Indo-Chinese need no commentary:

"The ancestors of this formerly illiterate young man were always semi-nomads of the mountainous regions covered with dense forests. Beset by epidemics, weakened by under-nutrition and malaria, living outside any evolution, their race was in the process of complete disappearance. The Sangkum has been particularly devoted since its accession to helping its disinherited compatriots become totally integrated in the life of the nation. Today, a large part of this population accepts to be regrouped in large villages where the royal government can provide them with efficacious medical and economic aid, construct schools, dispensaries, etc."[14] And further: *"Until a recent time, his poverty seemed to be irreversible. Today he again has hope".*

These propaganda texts announcing the promising dawn of a new era are not only the reflection of a new reversal of values – the indigenous person is he who must be helped and guided –, but they also announce what the French philosopher of anthropology Affergan calls the passage from otherness to difference:[15] the other, the man in the forest, is no longer perceived as someone mysterious, remote, inaccessible and fundamentally implacable in his savage nature, but as someone different because his evolution diverged at a certain moment of his history, because he did not have the opportunity to

adhere to the sphere of influence of the surrounding civilizations. Since then, "the forest dweller" requires assistance in order to be put back on the good path; and all, or nearly all, that he as acquired in the course of his period of autonomy is perceived as inadequate and must be modified so as to make up for the backwardness due to his isolation.

In fact, the so-called development of the region was in the hands of soldiers. At the same time, the migrations of Khmer families were greatly encouraged for two reasons: to populate in order to develop the zones still very sparsely inhabited, and to give an example of a new way of life to the local populations. It goes without saying that this interest in the neighboring regions was also of a geo-political order because it was necessary to control the borders with Laos and above all with Vietnam, considered as an always potential invader.

This first attempt at integration, interrupted by a few local revolts (Tampuan and Jorai who refused to submit to the constraints of work in the hevea plantations), was nevertheless brief because, beginning in the 1960s, a number of incredible events succeeded each other: the retreat of the Viet Cong troops to the east of Jorai territory, American bombardments over the entire central plateau and east of Ratanakiri and Mondolkiri, the advance of national regular troops, confrontations between communists and nationalists, and the discreet installation of the first bases of the Khmer Rouge who, profiting from the general debacle, began to gradually take control of the forest zones in the two provinces.

It is difficult to determine *a posteriori* what types of relations were established between the Pol Pot troops and the indigenous populations. In any case, it is absurd, and dangerous, to evoke a generalized cooperation between the two. It is possible to educe, as David Chandler did, the fact that the many hardships endured by the Proto-Indo-Chinese created a terrain favorable to their being won over to a doctrine[16] that, initially, put them on a pedestal. For the first time in their history, foreigners from the plains came to their defense – or at least appeared to do so – and elaborated a laudatory discourse in their regard: the social life of the indigenous people became a model of behavior that was to be generalized among all inhabitants of the nation. It is also undeniable that the indigenous populations benefited from a "privileged" treatment compared to that inflicted on the populations of towns. However, while some of them adhered voluntarily and others without great conviction, antagonisms were created in the villages and isolated families or groups of families often left their village when they realized that it was coming under the control of the Khmer Rouge. But as soon as the latter began to show their true face, *prior to 1975*, numerous confrontations occurred: skirmishes opposing villagers and Khmer Rouge and those associated with them, entire villages (Kraveth, Brao) were decimated. Others succeeded in fleeing and attempted to reach Laos or Vietnam, and the survivors of this exodus were among the first to join the liberation forces in exile (some of which were posted in Laos). In other places, Kreung,

Brao and Tampuan villagers were enlisted by the troops of Lon Nol and the survivors were evacuated with their families to refugee camps in 1975.[17] During the period 1975-1978, the Khmers and mostly the people from Phnom Penh sent to the north-east provinces suffered much less than in other regions. According to our own evidence and contrary to what has been said elsewhere,[18] the local cadres enlisted by the Khmer Rouge were far from being merciless. Moreover, as Joanna White underscores,[19] the often emphasized idea of a similarity between the communal models of the Proto-Indo-Chinese and those of the Khmer Rouge as proof of a link between the two says more about the influence that the former had over the ideology of the latter (Pol Pot and Ieng Sary said as much themselves) than it would show the existence of a natural or innate bloodthirstiness among the indigenous populations, or that they blindly obeyed any kind of order coming from a venerated chief. Such hypotheses, transformed into near certainties by some authors, are merely the result of imagination and unfortunately only reinforce the unappeased will to seek at any price a scapegoat beyond oneself. Finally, while a few forest dwellers effectively did well and were promoted to what they viewed as important or prestigious positions and became unconditionally loyal to Pol Pot, most of the inhabitants in Ratanakiri and Mondolkiri, like the Khmers throughout the country, suffered from hunger, deportation, victimization, family separations, the formal interdiction to carry on their cultural and religious traditions.

Although their cultural identity was momentarily suppressed, it was by no means eradicated. In the late 1970s, the villages were formed again, the old organization quickly regained the upper hand, ancestor worship and sacrifices to the spirits were once more carried out openly, while music and gongs – those spared destruction by the Khmer Rouge – resounded once more. Only a few villagers who had been initiated into rice cultivation at that time continued this agricultural practice, as opposed to ground-clearing.[20] The Vietnamese period, according to the indigenous populations, was not so prominent in Ratanakiri. It was somewhat more so in Mondolkiri, where the *Krom Samaki* system, with the spatial division of the villages in cooperative work units, continued to more or less effectively function until the retreat of Vietnamese troops in the early 1980s.

How is this (briefly sketched) history interpreted by the forest dwellers? It is interesting to observe that there are no systematic contradictions between documented historical sources and the history as transmitted by oral literature, mythology and a number of epics. Everything takes place as if the latter were a representation, somewhat romanticized, imaginary and poetic, of purely descriptive facts that really took place. This does not mean that oral tradition would be an irrefutable source for tracing the history of the Proto-Indo-Chinese. Let us only say that in certain cases it can serve to support, perhaps call into question, a number of historical presumptions pertaining to the movement, origin and contacts between different groups. It is generally admitted by the sci-

entific community that there would have been ancestors common to both the lowland Khmers and to the indigenous populations [Chandler 1993, Steinberg 1957, Morizon 1931]. Other authors, for example Jacques Dournes, consider that the Jorai and the Cham descended from the same stock. The Proto-Indo-Chinese in Ratanakiri and Mondolkiri share in their discourses these filiations with the Khmers, and all the ethnic groups consider themselves to not only be the first people in the region, but brothers and sisters of the inhabitants of the plains. Different myths explain how, first geographically then socially, a separation took place in primordial times (the notion of duration has no importance in myth, what counts is the founding act that legitimates it). The creation myths vary greatly in their content, also within one and the same ethnic group, but the formal structure is consistent and gives the impression of an alternation between the homogeneity of all peoples, followed by an *a posteriori* differentiation. Sometimes the myths emphasize what brought the populations together in an imaginary past, sometimes they speculate as to the reasons for their specificity.

A myth that is widespread in a large part of South-East Asia (Laos, Vietnam) and known by everyone in Ratanakiri recounts of the origin of languages and explains why the Proto-Indo-Chinese have a different knowledge and have lost the art of writing. Other tales deal in a detailed manner with the creation of the Earth by the supreme god (*Brah* among the Kachah) who brought about life, developed nature, trees, humans and spirits of places, who are supposed to control and censure the inopportune acts of humans. In these long narrations, which can continue over an entire night, the narrator, adding his own idiosyncrasy, evokes the manner in which society left the original chaos behind and was organized. Also recounted are the tribulations of the ancient heroes, who by their meritorious deeds brought about justice and undertook to restore the wrongs committed among humans. These epics are comparable to didactic texts in which the moral evokes – in a frivolous, comic atmosphere filled with embellishments – the misfortunes that humans can bring upon themselves when they defy the rules decreed by society. At the time of a familial or collective ceremony, the old people, profiting from an occasion when people come together, transmit these stories in an atmosphere, bolstered by rice alcohol, in which the gestures and the tone and rhythm employed lend a theatrical, emotional, vivid and each time original aspect to the recital.

But the myths are not petrified; they gradually integrate new elements arising of recent contacts and historical events. It would thus appear that the proximity of the groups and the quality of their relations (economic, political, bellicose, amiable, etc.) must find their justification in the words of the old people, which can inconceivably be called into question. Every myth contains a sacred dimension and thus becomes irrefutable. This is why the Khmers, Laotians, Thais, Chinese, Vietnamese, etc., and more recently the French colonists, find their places in the legends that offer new explicatory variations of the phylogenetic origin, of the beginning of a given practice, of a specific relation that

can prevail between the new arrivals and the autochthonous peoples.

The function of the myth is multiple. Some, reserved for children, have an educational and practical value; others offer a view that makes it possible to understand the world and the place occupied by man in the cosmos. Some explain a behavioral norm particular to a specific group (food prohibition, interdiction of hunting, of a cultural practice for a clan among the Jorai and Tampuan); yet others evoke prominent events that were decisive in the evolution of a group and justify a current situation through an act committed by the ancestors. My objective here is not to make an inventory of the different types of narration, but we should remember that there exist other forms of oral literature, spoken or sung, that are still very much alive. I will confine myself to only mentioning a few.

Oral literature, the content of which varies greatly from one group to another, does not constitute a complete, systematized collection that is uniformly recognized within an ethnic group, and *a fortiori* also not among all the Proto-Indo-Chinese in Cambodia. It is possible to discern a common backdrop for certain epics and legends, for songs and myths, but the particularisms, the local adaptations and the verbal contents are contextualized. The texts of many of them have roots in specific events, sometimes guarded and intended for a restricted group.

The song is a form of popular expression that is highly regarded and widespread among most of the ethnic groups. Tampuan, Mnong and Jorai men and women can be formidable singers (solo or duo) and are often seen at festivities to be veritable artists whose verve can captivate the other participants. Melodies of love, which are predominantly sorrowful, are of course the most often heard. Others tell ancient tales, staging complex scenes of impossible love (between persons of the same clan, village enemies, etc.), while others are nostalgic laments, as myths pertaining to the golden age, calling forth former times when hunting meant abundant game and rice grew of itself, when the spirits of the forest were less vexatious.

More recent plaints speak of vicissitudes inflicted by the Khmer Rouge in the villages. Some have an individual character, the knowledge of which is certainly limited to a few individuals or a family, while others have a wider public. For example, a mimed song recounts of the despair of a woman who is unable to offer the spirits a chicken sacrifice for her child, who is sick with fear of being caught red-handed and punished by the Angkar soldiers. Another Tampuan song evokes the cruel separation of a family; the children are sent to the Ou Chum plains to build an embankment while the parents work in the rice fields and, separated at night, must sleep alone. Three years later, when the village is free of the yoke of Pol Pot, the family discovers that the maternal grandparents have died in the absence of any ritual.

Along with these prosaic orations, there are sacred chants like the Mnong religious prayers. They are addressed to beneficent spirits and sometimes to god the creator dur-

ing important agricultural ceremonies. Long incantations are also uttered when a large tree is to be felled or prior to the clearing a forest parcel, when the spirits are entreated to allow men to establish themselves on a desired site. It is thus important to understand, apart from the content, the circumstances in which the narrations take place, in what moments of daily life they are liable to emerge and for what reasons.

Among the songs closely related to a specific activity, I cannot forgo mentioning what constitutes one of the most moving memories of my life among the Tampuan. At the bend of a path along a cleared field I was taken unawares by a group of young women singing *a cappella* marvelous poetic recitations addressed to nature, and more particularly to the shrubs they were cutting. Reedy voices rose with melodious timbre in the dense forest, imploring the spirits of the place to understand their deed, which must be done before the rice planting, and promising that oblations would be made in recompense.

The chants at religious ceremonies, marriages and funerals, accompanied by the poignant tones of the famous gongs – there can be as many as thirteen distinct gongs - add to the richness of oral tradition, as do the genealogical chants tracing the alliances of the lineage. Individuals I met among the Mnong in Mondolkiri, who preserve a genuine family anthology, are able to go back more than fifteen generations and name more than one hundred agnates and cognates. Children's songs range from berceuses to nursery rhymes and recount of forest animals, narrating comical situations experienced by unlucky hunters, fishermen or warriors. There are many poetic genres comprising wonderful flights of lyricism, or texts that pertain to customary (juridical) matters, of which I was only able to glimpse the richness, unfortunately without being able to interpret them.

Proto-Indo-Chinese oral literature serves not only to transmit knowledge. It reflects in some cases their concepts of life and is of assistance in understanding their peregrinations, the manner in which historical events are perceived, what makes up their joys and misfortunes, their distress and their hopes. It also teaches us a philosophy, an ethics of human relations. Oral tradition communicates a form of wisdom when it speaks to us of reciprocity between animals, plants and humans, and of the harmony that exists – or is supposed to exist – between human beings and nature, even if this equilibrium tends to be upset in our days. The calling into question of a way of life that has evolved at its own pace, the imposition of a new order, the threat of standardization, the degradation of a cultural wealth, some aspects of which are falling into oblivion – these are the inherent risks of the so-called development with which the indigenous populations are confronted, and for which I will briefly suggest a few points for consideration in conclusion to this paper.

An uncertain future

Ratanakiri and its indigenous population are on today's agenda. Tourists begin to arrive, NGOs are flocking there: all are rushing to encounter the last savages who would inhabit the most remote corner of the forest. For international bodies, it is a matter of saving these unfortunates from misery, of "integrating" them into the nation, into the world economy, into *civilization*. For this reason, the future of the Proto-Indo-Chinese populations is in an initial stage of vulnerability with regard to external influences. This vulnerability is not only connected with development policies the government considers implementing, with the intensification of interactions with the lowland populations, but above all with the uncontrolled intrusion – and it is only beginning – of foreign and national private companies seeking to appropriate the wooded territories. What is more, using villages to attract tourists should be carefully considered in view of the harm caused by "tribal" tourism in Thailand and other Asian countries.

Agricultural practices must inevitably change, but in accordance with the local populations. For the moment, the government envisages hevea plantations, cashew nut, coffee, pepper, mixed vegetable farming and animal husbandry. But, there is presently no fertilizer, implements are not available, there is neither technical training nor selection of cattle and goats to improve breeding. Not to mention the fact that the encouragement of cash crops to the detriment of food crops is the first step towards external dependence. Foreign companies and national investors regularly come to open negotiations, in particular to plant oil palms, the intensive cultivation of which in the highlands is not viewed as viable by agronomists. While no activity has yet begun in Mondolkiri, the contrary is the case in Ratanakiri, where the first factory opened its doors in early 1995. In October 1995, 60,000 hectares of wooded areas were granted to some ten companies, proposing plans for forest management and conversion to cash crops, not to speak of the 1.5 million hectares in the north-east that have been granted to Indonesia. It is clear that the Proto-Indo-Chinese who live on basaltic soils that are among the richest in Cambodia represent an *obstacle* for these companies and for government officials and ministries attempting to develop the country, which has only recently left the war behind and is still weak, by trying to accumulate foreign currency as quickly as possible. This is tantamount to forgetting that ultimately this type of development is not "sustainable" and that nothing guarantees that the foreign (or national) investors will respect the contractual clauses, as past experiences in other places in the world show (Surinam, East Timor, Thailand, India, etc.).

As long as there is still time, two conditions are indispensable for ensuring the protection and respect of Proto-Indo-Chinese identity. First, on the legislative level, they must be recognized as Cambodian citizens, and then their land rights must be acknowledged - because the recognition of their ownership rights constitutes the basis of any other action. Without these basic rights, any development project is like a bottomless pit and

the chances are high that it will serve no end. In the second place, it is necessary that the populations take part in their own future and that final decisions be left to them. Four decades of development in countries of the South have clearly shown that any action that is carried out coercively will only end in often irremediable failure for both parties (the developers and the developed). Any external intervention on the part of a government can only play a consultative role, under pain of repeating a pre-colonial attitude that is the first to be called into question when it is a matter, justly so, of declaring the country's sovereignty respective of foreign powers. For their part, the indigenous populations must modify their cultivation practices, reduce the cleared area and adapt themselves to a new environment; but, they must also be aware of the risks in any given case. The social, economic and cultural costs that accompany the changes should also be clearly evaluated before, and not after, development processes are initiated. It is essentially through knowledge and mutual understanding that it will be possible to clear the way for harmonious development that can improve the quality of inter-ethnic relations.

From the awarding of good conduct diplomas to villagers who quietly adhere to the policies of Khmerization,[21] to fanciful appraisal by those who promote a new way of life, to the sale of huge areas of land ratified by high-ranking civil servants in Phnom Penh, one is justified in asking if what is termed development of the indigenous populations is not a misunderstanding, or at worst a huge travesty, that marks the beginning of the subjugation of Proto-Indo-Chinese societies. The manifest refusal to understand the others in terms of their own categories expresses the anxiety and denial by modern societies - will Cambodia be an exception? – to conceive of the realization of a genuinely plural society in which ethnic diversity would be a source of wealth, multiple possibilities, hope and proof of tolerance. One who has had the opportunity to be near these populations, to listen to their myths, to observe their courage and the way they work, to share moments of life with them, their festivals, joys and disappointments, can only take leave of them enriched with new knowledge and an undreamt-of view of the world.

My thoughts join those of Georges Condominas, who throughout his works affirmed that the first necessity resides less in theoretical knowledge than in the testimony of a form of collective life constituted by an original human group[22] that will soon no longer exist. It is for us, together with them, to interpret and transcribe a memory through which messages are imparted, messages that their descendents and ours will, I hope, one day understand.

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Notes

1 Jean Delvert, *Le paysan cambodigien*, Paris, 1961, PUF.

2 Georges Condominas and André Georges Haudricourt, "Première contribution à l'ethnobotanique indochinoise", Revue internationale de botanique appliquée, 32, pp. 19-27.

3i This is an abbreviation of the Khmer locution *choonchiet piaktek*, which means minorities. The villagers thus call themselves *choonchiet* Tampuan, *choonchiet* Brao, etc.

4 For example, a clan of an ethnic group is identified as a separate group.

5 Georges Diffloth, "The Indigenous Minorities in Cambodia and the Elections", Report for UNTAC, Phnom Penh, 1993.

6 Pluvial rice does not correspond to an older agricultural stage than irrigated rice. André Georges Haudricourt has shown that wild rice is an aquatic plant that was first cultivated as an irrigated crop. "Dry" varieties of rice subsequently replaced the yam, which required more attention.

7 Yves Goudineau, IRD, personal communication.

8 Pierre Clastres, *Le société contre l'Etat*, Paris, 1975, Minuit.

9 Marshall Salhins, *Age de Pierre, âge d'abondance*, Paris, 1976, Gallimard.

10 With the exception of the Jorai from Vietnam, some of whom know and write the Romanized alphabet of their language, which was perfected by the French in the colonial period. Let us also note the appearance of Mnong writings (and soon of others) by evangelists.

11 Van Vusthof, "Voyages lointains aux royaumes du Cambode et Laouwen", annotated by F. Garnier, *Bulletin de la Société de Géographie*, Sept.-Oct. 1871.

12 Henri Maître, *Les jungles Moï*, Paris, 1912, p. 483.

13 Jacques Doumes, *Potao. Une théorie du pouvoir chez les Indochinois Jorai*, Paris, 1977, Flammarion.

14 *Le Cambodge aujourd'hui*, 1960, n^{o} 5.

15 F. Affergan, *Exotisme et altérité*, Paris, 1987, PUF.

16 David Chandler, *A History of Cambodia*, Melbourne, 1993.

17 A large community of Proto-Indo-Chinese lives since then in Lowell, in the north-east of the USA.

18 Marie-Alexandre Martin, *Le Mal Cambodgien*, 1989, p. 201.

19 Joanna White, *The Indigenous Highlander of the North-East: an uncertain future*, Phnom Penh, CAS, December 1995.

20 However, several Kachah, Tampuan and Brao villages knew and practiced the irrigated cultivation of rice well before the advent of the Khmer Rouge. They had learned this for the most part from the Laotians.

21 Helmur Jonsson, *Final Report to Health Unlimited on Health Issues among Upland Groups in Ratanakiri*, July 1992, Health Unlimited Office, Phnom Penh, 1992, p.2.

22 Georges Condominas, *L'espace social*, Paris, 1980, Flammarion, p. 100.

CHAPTER 7

The populations in the *khet* of Ratanakiri. Elements for the ethno-history of Proto-Indo-Chinese civilizations in north-east Cambodia

The province, or *khet*, of Ratanakiri is located in the north-eastern extremity of Cambodia. It covers an area of 12,561 km^2 on which roughly 70,000 people lived in 1994. Its vast and little exploited territory, its distance from the capital – more than 600 kilometers - and its low population density (5.5 inhabitants per km^2), only that of the neighboring province of Mondolkiri is lower (with less that 2 inhabitants per km^2), gives it the appearance of an inhospitable region, difficult to populate, unknown and isolated. There is but a single step from reality to exaggeration, which has been bitterly taken if one examines the social representations transmitted by the Cambodians with regard to this space inhabited by an array of tribal populations.

Ratanakiri has however enormous natural resources (gold, corundum, semi-precious stones, copper ore, lead sulfide, etc.) and lands that are among the richest in the country (basaltic soils). No region in Cambodia exhibits so many socio-cultural diversities.[1] But, it must be acknowledged that no systematic presentation of the history of the population and the socio-territorial distribution of the populations has ever been made.[2] Today, this void contributes to the fostering of clichés and *a priori* notions on the subject of the living conditions of the aborigines, abusively perceived as obscure bands of nomads with doubtful morals who destroy with impunity their natural environment. While the government has the firm intention of exploiting the regional agricultural landscape, it would appear necessary to take stock of the scattered data in the available literature, while adding our own investigations in the field concerning the recent situation.

A turbulent past

Archaeological vestiges, historical evidence and travel accounts attest to human presence in the forest zones of the highlands for centuries. Several clearly differentiated ethnic groups are carelessly referred to with the generic terms "Phnong (Bunong)" and more recently "Khmer Loeu"[3] by the people in the plains. With a few rare exceptions, authors have only mentioned these populations as an aside in their writing, as if their existence were merely the result of an ersatz ephemera symbolizing a way of life doomed to disappear, as in the extract below.

"The Chinese, Vietnamese and Islamic Khmers are not the only ethnic or cultural minorities to be found in Cambodia. But the other groups are (…) or better yet small "semi-civilized" tribes, the fragments of autochthonous races or very old invaders driven back by the Khmers to the mountains and forests on the periphery of Cambodia. These small tribes, who moreover enjoy Cambodian nationality, are called Khmer Loeu. The denomination encompasses different ethnic groups (…). Their economic importance is negligible".[4]

In reality, the autochthonous populations in the province, along with those living in the mountains and upper plateaus in Vietnam and southern Laos, come from the same cultural group called "Proto-Indo-Chinese". This neutral term dismisses pejorative appellations such as *Moï* (savage) in Vietnam, *Kha* (slave) in Laos and *Phnong* (mountain dweller) in Cambodia. In Ratanakiri, the Proto-Indo-Chinese are ground-clearers. They do not have "a drop of Khmer blood" and only a very small minority practice rice cultivation in the plains. Their social, religious and cultural affinities have nothing in common with those of the Khmer, Vietnamese or Laotian civilizations surrounding them. From where do these aboriginal populations come? How did they establish themselves in the present region of Ratanakiri? At what point in time? These are questions that, given the current state of knowledge, remain without any precise answers.

It is difficult to trace the first contacts to have been established between the plains people and those in the regions of high and low plateaus, including Ratanakiri. The royal chronicles provide but cursory information and only the ritual exchanges and gifts between the Cambodian king and the religious chiefs of land, water and fire (the three *Sadet*) testify to very ancient politico-economic links between the ethnic Jorai in Vietnam and the Khmers.[5] On the other hand, numerous relations with the outside world are clearly established.

Until the reign of King Norodom, the non-Khmer ethnic groups represented a potential source of slaves sold either privately or for public utility works in the kingdom. The builders of the Angkor temples called largely upon the forced services of these populations by instituting a recruitment system that extended well beyond the present Laotian, Thai and Vietnamese borders. The slave trade goes back to a much earlier period, for it is mentioned in the *Krâm Téasa Kammakâr*.[6] In this Cambodian code, the legislators meticulously specified the statuses of the different groups, such as the Phnong, Laotians, Rhade, Kuopio and the Pear. Their prices are mentioned as well as the complex modalities through which the nationality of children of slaves was defined. Notwithstanding decrees abolishing its practice, man hunting was to continue into the nineteenth century in the northern provinces of the country.

"This condition of beasts of burden is reserved only for ethnic savages in north-east Cambodia, and the slave trade is carried out along different routes, but the main repository is in Sambok, a Laotian frontier province. Following frequent quarrels among the savages, the inhabitants of a village often raid an enemy village at night, seizing women and children as well as men sleeping in their huts, and selling the captives to Laotians, sometimes even to Chinese or Cambodian traffickers (…). Most of the slave trade would be done directly by the King of Cambodia, who sends every year some sixty elephants loaded with items for exchange in order to procure slaves, but it often transpires that the unfortunate captives are bought by Laotians who take them to either Sâmbok or Phnom Penh, where they sell a considerable number of them to Cambodians and Chinese".[7]

Ironically, the captive state was the first form of "integration" of inhabitants of the mountains and the low plateaus into the kingdom of Cambodia. Similar to West Africa, the flourishing mercantilism only degraded the inter-tribal relations insomuch as some groups actively participated in raids on their neighbors to capture and sell able-bodied persons – men, women and children – to the traffickers. However, contrary to what authors of the period said, there is every reason to assert that it was the external demand for slaves that deteriorated or more or less intensified the antagonistic relations between autochthonous groups, and not conversely. Numerous adventurers came to try their fortune in the region: the town of Simpang on the banks of the Sekong became in the eighteenth century the fief of a Khmer colony specialized in slave hunting. The thesis that the bellicose temper of the tribes fostered the development of slavery, making it a part of their traditions, scarcely matches with socio-cultural and historical facts and is based mainly on the disdain felt towards the populations with a status improperly translated as slave.

"Although the horrible custom the savages have of selling each other among themselves seems to be the main sustenance of the slave trade, Laotian traders or others, with few scruples as to the choice of means, are also said to procure slaves to sell through a veritable manhunt, carrying out nocturnal raids".[8]

It was in fact the Sedang and the Jorai in Vietnam (Pleiku province) who acquired in the nineteenth century a reputation as bandits by looting the Annamese convoys that ventured into their border areas. But apart from this very particular type of territorial protection that co-existed with long-distance slave trade stemming from the demand of the lowland populations, two original forms of slavery emerge from the texts making allusion to this: the first concerns prisoners captured by kidnapping or battles, and the second relates to "slaves" for debts.[9] The prisoners were however traditionally treated as fully-fledged members in the clan relationship and ultimately enjoyed a near total freedom. The status, which was provisional, differed in the sense that they could not leave the village. This characteristic feature of human captivity could go so far as to result in the adoption of the person into the enlarged family.

As J. Matras[10] underscored, if the Ratanakiri region was never heavily populated, it owes this to the reversals in its history and not to its geographic position. Quite on the contrary, the Sesan and Srae Pok valleys, covered with sparsely wooded forests, are easily penetrable and constitute a favored access route between northern Cambodia and the upper Annamese plateaus. The interfluvial zone, which is up to fifty kilometers wide, was less traveled, but from the seventeenth century travelers such as the Dutchman G.V. Wuysthoff recorded economic activities between the towns on the Mekong and the inhabitants in the interior. The Khmers in the present province of

Stung Treng bartered salt and iron for gold, wild animals and other valuable forest products. But, once again unverifiable hearsay abounds and little is known about the nature of the relations maintained with the forest people, and still less about the number of inhabitants.

Archaeological vestiges from a twelfth-century fortress located a few kilometers east of Veun Sai[11] indicate that northern Ratanakiri was an area of temporary withdrawal for the Cham, who were expelled by the Hue and driven ever farther west by the Vietnamese. Beginning in the fifteenth century, the Khmers controlled once more the overland routes and waterways in the region. They subsequently gave way to the Laotians who, starting from Attopeu, gradually colonized the banks of the Sekong, Sesan and Srae Pok Rivers. Slave trade was not the only objective of negotiations between the Lao and the ground-clearing populations, for more peaceful trade relations were established with the villages located in the deep forest, the inhabitants of which were better able than the new migrants to recognize and make use of the natural and animal resources in their accustomed ecosystem. The successive establishment of the Khmers, Cham and Laotians, with all the contacts this involved, show that contrary to certain unverified assertions,[12] the aboriginal populations did not wait until the 1960s to forsake a closed economy.

While the first Jesuit missionaries from Portugal began to evangelize the coasts of Annam in the seventeenth century, it was only 200 years later that priests settled in the highlands of central Vietnam.[13] North-east Cambodia was near and physically accessible but, according to the sources consulted, no trace of religious proselytism was found in the region that concerns us here. Contrary to the classical schema of penetration into the distant regions of Indochina, there would have been no mission establishment able to open the way for large exploratory voyages, to in their turn serve as a springboard for colonization.

Although the region was reputedly unsafe, this was due more to the amount of trafficking that took place there than to the presence of autochthonous populations *stricto sensu*, who ultimately only protected themselves from external transgressions. In the mid-nineteenth century, the Siamese took advantage of the confusion and lack of territorial control and advanced along the Sesan, annexing the northern provinces of Cambodia and southern provinces in Laos. Their intrusion, based mainly on repression and the institution of a tax system only increased the confusion, disintegration and anarchy among the different ethnic groups. For the first and last time in their history, the populations in Ratanakiri were bound to pay a tribute. In 1887, the town of Veun Sai was formed as an advance military and administrative post in order to more effectively control the collection of taxes and to mitigate the underlying insurrections. This dependency was short-lived, because the French, newly established in Cambodia, contested this region with the kingdom of Siam and dispatched in their turn expeditionary

forces responsible for clarifying the geo-political situation, pacifying the populations and demarcating the regional boundaries: the Pavie mission, led by Colonel Cupet, was created.

Thus, at the end of the nineteenth century, colonial soldiers and administrators replaced the intriguers from all sides who had plundered the areas of strategic interest in Ratanakiri for their lucrative resources (the villages in the river biotope for gold and slaves, the villages on the edge of the dense forest for barter with those established in the depths of the forest). The documents pertaining to the former are fundamental because they constitute the only testimonies to the life of the tribal populations. Mention is made of a region in a permanent state of alert, of fortified villages, of distrustful inhabitants overwhelmed by the tithe levied on them by invaders from the north.[14] Accounts that are richer in anecdotic and ethnographic detail mention the names of the Brao, the *Tiom-Pouen* (Tampuan) and describe some of the picturesque ways of life.

The partitioning of the frontier zone between Cambodia, Vietnam and Laos was done by France in 1903.[15] It did not take ethnic distribution into account; the Jorai saw their territory being cut in two, while the Brao from the north (the region of Attopeu in south Laos) were split between Laos and the new provincial authority of Veun Sai. After several exploratory escapades had come to abrupt ends,[16] we must wait until the brilliant description by H. Maître in 1911, the outcome of a long stay in the country, to have the first complete report relating to the existence of aborigines populating Ratanakiri and the surrounding regions.[17] The expedition also entered the northern part of the Sesan, which remains a *terra incognita* to this day. Other missions, although on a smaller scale, were carried out over the course of the next decades. Nevertheless, the chief preoccupations of the French in these troubled times were directed elsewhere; the particular administrative status accorded the province allowed it to fall into a state of relative lethargy. This was, after all, perhaps a time of respite for its inhabitants.

Beginning in the 1930s, the Sihanouk policy of assimilation came into being at the same time as an attempted colonization by voluntary immigrants. According to the classical rhetoric that persecutes all ethnic minorities in all parts of the world, it was decided to "civilize" the populations and save them from barbarity, ignorance and misery. It was first a matter of having them adopt a sedentary lifestyle, to resettle them along the rivers (which had never been their biotope), to awaken in them the need to learn to speak, read and write Cambodian, as well as to dress more decently, work more rationally and build more solid houses. In one of his incantatory speeches, Sihanouk implores them to place themselves in the hands of "the competent provincial departments" (i.e., civil and military) when choosing sites for villages and lands suitable for cultivation. The refusal on the part of inexperienced civil servants, incapable of understanding the point of view of the indigenous peoples, to recognize the identity of the autochthonous

populations, their disregard of ancestral land-use rights and the failure to see them as development actors could only lead to conflicts. Organized movements of rebellion and revolt against the pro-military government in power opposed Tampuan and Jorai, armed with crossbows and poisonous arrows, and government troops. The "rebels" (as they were then called) attacked the state hevea plantation.[18] In fact, for the villagers who were forced to move to the edge of the plateau and leave their fertile red soils, the plantation symbolized the monopolization of the forests and of the land where their ancestors once lived. What is more, it became synonymous with exploitation when the crucial lack of Khmer labor incited the authorities to requisition the autochthonous people for the clearing work. The total disinterest towards the unfamiliar and enforced mode of working, involving practically unknown social production relations (wage-earner/employer relation, strictly regulated working hours, payment in cash), changed to jacquerie, which the army hastened to brutally curb.

In the years 1967-1968, Ratanakiri's profile underwent tragic changes. Its geo-political position in the center of Indochina with potential channels to Laos and Vietnam only served to increase its marginality on account of the fomenting conflicts stemming from the Cold War. The trafficking in arms (and opium?) had already crossed the region for several years and its instigators relied on the aborigines as guides, scouts and protectors. Although there had been no systematic cooperation between the highland populations and the rebel movements, the royal government was worried about uncontrolled machinations of "enemy" factions and their influence on the local population. Taking advantage of the disorder and the prevailing guerrilla warfare, the Vietminh troops massively occupied the eastern part that included the territories of the Jorai, the Kachah and a few Tampuan villages. The issues were threefold: to mobilize the populations agitated by the heavy-handed intervention of the Cambodian government, to control the territory, and to protect the Ho Chi Minh Trail that crossed the center of the region from north to south. The coming to power of Lon Nol in 1970 allowed the Americans to control several bases, located geographically opposite those of the Vietnamese communists. The B52 bombardments and the use of defoliants still stand out in the memory of the populations and in the features of the landscape. Numerous villages were methodically destroyed; the inhabitants were given no possibility to flee. Vast patches of forest to the east were destroyed by napalm and defoliants. Some zones were ecologically ravaged and have become uncultivated portions of *Imperata* savannah, which is difficult to remove once it is established. The craters caused by the bombs are scattered along the roads suitable for traffic and testify to the sites of former villages and to the magnitude of human and material destruction. The cleared fields (with the peasant's house in the center) remote from the village were often taken by aerial scouts for potential zones where enemy troops could take refuge, and were bombed accordingly.[19] Villages, families, crops and forests located on the low plateau suffered losses,

the scope and significance of which no one has ever dared to measure. The destruction was of course not as unconditional and radical as in the neighboring provinces of the highlands of Vietnam, where numerous minorities were physically eliminated and where the majority of the survivors were irremediably acculturated following massive deportations via transit camps. The foreign intervention in Cambodia was also more confined and sporadic. However, another movement with equally weighty consequences, and much more durable, took shape at the same time as the intrusion of Pol Pot's troops.

Towards the end of the 1960s, the Khmer Rouge leaders had gone underground in the forests of the north (Kratie province), then established their main fiefs in the north-east of the country in Ratanakiri in the former Bantang *khum*. Several "awareness" camps were set up. The Brao and Jorai remember attempts to make them aware of their daily precariousness through slogans such as "people are profiting from you", "you only eat roots", "no one looks after you", etc. The rebel strategy aimed to conquer the local populations, who were already worn out by the royalist development policy. In the course of the years 1972-1973, following the simultaneous retreat of the Vietnamese and the Americans, the province had the sad privilege of being the first to fall into the clutches of the Khmer Rouge.

From the above, to assert that the tribal minorities constituted a base for Pol Pot's troops was but a single step, and one that was (and continues to be) blithely taken by politicians as well as by some observers. Through lack of discernment and perhaps the unconscious will to reject the atrocities perpetrated by the Khmers on non-Khmers, the aborigines in Ratanakiri were perceived as the hard core of anti-government resistance, and worse still, as a band of degenerates inclined to unreservedly kill the civilian populations in the plains. In reality, things did not transpire quite so simply. The submission of the "savages" of the forest did not take place without mishap: following the example of the Khmer provinces, the recalcitrant village leaders were assassinated, hamlets devastated (in particular among the Tampuan, the Brao and the Kreung), and entire villages had to flee after unwanted propagandists had been killed. The Brao in the north of Thaveng district commemorate the headlong flight to Laos, which required a month-long trek over unbeaten paths with women, children and old people. Other Brao and Jorai families crossed over to the Vietnam side, knowing very well that the socio-political situation there was also not idyllic. When collectivization took shape in 1975, the ethnic groups found out in which direction the Khmer Rouge were predisposed. The Pol Pot repressions increased following rebellious movements in the villages subsequent to the attempt to completely change their way of life, which had until then been relatively preserved. Their families were separated and children were sent to itinerant teams; religious ceremonies, animal sacrifices[20] and the traditional consumption of alcohol and rice beer were interdicted; their habitual clothing was banished,

along with and all valuable possessions (jewelry, gongs, crafts, etc.); they had to work under restrictive conditions and religious leaders and all those (shamans, healers, soothsayers) who practiced a sacred art were physically eliminated.

The dismemberment of the notion of family – nuclear, enlarged, lineage – and the clan structures, together with the introduction of forced marriages – organized in groups –, only deteriorated the already limited relations between the inhabitants and the occupying revolutionaries. Displacements to labor camps in other districts were frequent and many aborigines took advantage of this to flee to refugee camps, rather than remaining under the control of the *Democratic Kampuchea* party and thereafter of the Vietnamese. We were able to collect many comparable accounts when there, but this is not the place to relate them, or to present manifold evidence supporting them. Let us simply say that these accounts forbid hasty generalization as to the behavior of the ethnic groups in connection with the despotic regime.

It is consequently imprudent to assert in an unbalanced manner the seditious nature of the inhabitants of northern Cambodia. Of course, it cannot be denied that the soldiers recruited in the villages rallied around the insurrectionary movement and that others adopted year in, year out the revolutionary ideology, like the Khmer peasants enlisted everywhere else. In any case, no historically confirmed scientific evidence supports the *predominance* of indigenous ethnic groups in the armed struggle. Were they proportionally in greater number than the others? Did they too easily adhere to causes proposed and then imposed? Nothing until now would permit of this assertion, if not a few scattered and too readily generalized observations.[21] At the fall from power that was followed by the Vietnamese occupation in 1979, the Khmer Rouge beat a retreat as far as Sedap *phum* on the bank of the Srae Pok River. They attempted to drag the peasants and their families with them, but had to abandon this idea a month later, subsequent to the passive opposition of the latter (Jorai villages and Santhom *phum*). The pressure gradually subsided and, in the late 1980s, Ratanakiri was one of the first regions to be entirely liberated from the Khmer Rouge yoke. Guerrilla war made a few sporadic appearances on the borders of Stung Treng and Mondolkiri, to finally become only part of a traumatic past in the 1990s.

The ten years prior to the arrival of the United Nations Transitional Authority Government (UNTAG) were under the sway of the Vietnamese communists. The policy for the development of territory and assimilation advocated by Sihanouk some twenty years earlier was followed by the Heng Samrin government, which is not surprising if one recalls Vietnamese policy vis-à-vis the tribal groups.[22] In Ratanakiri, however, one can hardly speak of interventionism: the grouping together of settlement zones, the administrative organization in the chief towns and the appointment of leaders by the provincial authorities were not always followed to the letter. The region fell somewhat into oblivion. No recognized change materialized, in particular in the development of cultivated lands. The Vietnamese immigration policy was not especially encouraged, contrary to what the Khmers would experience later.

The ability and the will of the ethnic populations to regain their pre-war way of life and living conditions represent a remarkable fact in the 1980s. The villages were re-built, located on their ancestral territory, and re-assumed their former name; villagers began again to clear land on the scale of the individual family and re-organized festivities that brought together the entire clan, or the whole village. Women once more wove clothes and the colorful blankets with geometric patterns as they had formerly done. The ferment for rice beer was again prepared and one hastened to perform sacrifices to the spirits, who had had to do without them for such a long time. Houses were re-built on stilts as earlier and several villages evoked the memory of rituals to re-establish sites, which were also social "reunions" through which they severed themselves from a bygone interval. Everything took place as if life were to again follow its course after a forced interruption, demonstrating that the events of the past were not able to overcome the cultural dynamism of the tribal populations.

The historical dimension lends depth to the meaning of present situations. Without it, the traveler who, in 1994, traversed the *khet* from one end to the other would have been tempted to see societies outside time, perpetuating an ancestral way of life, imperturbable and unchanging. A brief diachronic outline shows this to be untrue.

An unequal spatial distribution of ethnic groups

Information concerning the demographic evolution of the population is scant and incomplete. No estimate was made by the earlier explorers, so illusory did it seem to exhaustively determine the habitation of a territory that was so extensive and unknown as a whole. The 1962 census indicates 49, 305 inhabitants, which represents a low density of 4.5 inhabitants per km^2.

Table 1: Population distribution in 1962

District (srok)	Women	Men	Total
Andaung Pich	7,038	7,090	14,128
Veun Sai	8,358	8,668	17,026
Lumpath	8,750	9,402	18,152
Provincial total	24,146	25,160	49,306

Source: cited by J. Fontanel 1967, p.7 (Institut national de la statistique et de recherches économiques)

The sex ratio disfavoring women is certainly to be accounted to recently settled Cambodian garrisons and civil servants. These figures, however, are considerably distorted. Precise verifications carried out by J. Fontanel reveal that a number of hamlets and a sizable portion of village inhabitants, theoretically counted, had been omitted. According to the estimates of this author, the population would in fact amount to 70,000

to 75,000 persons. The immediate period, which is one of intense political troubles, unquestionably saw the population seriously diminish, without counting the escapes and deportations caused by the pro-American regime, the Khmer Rouge and then the communist regime "made in Vietnam".[23] Twenty years later, the 1980 census conducted by Vietnamese experts put forward the number of 56,682 (of whom only five were their compatriots!). The names of the ethnic groups are sometimes confused, which leads to a mixed result. The difficulty involved in reaching certain settlement zones and the absence of a substantial number of families from the villages obstructs the accuracy of the data. Finally, in 1992, the census carried out by the UNTAG declares 66,764 inhabitants distributed in nine districts and 243 villages. Our own investigations conducted in 1994 adjust these estimates to 69,599, including a few additional villages.[24]

More than the total number, it is the ethnic distribution over the entire territory that is of interest to us, to which Table 2 refers. For reasons of expediency, we have taken the district as base. First, a comparison with the rare investigations conducted in the past will be useful because it shows that the localization of the groups has hardly changed for a century. The map established by Colonel Cupet[25] in 1890 is the earliest. Its approximate character does not detract from its pioneering interest; moreover, it served as a basis for all succeeding maps. The map by P. Bitard, administrator of the Veun Sai authority in the years 1948-1950, is more accurate. This was an attempt to inventory all the ethnic groups, who inhabited a much vaster territory than covered by the present *khet* of Ratanakiri, and was realized on the basis of diverse cartographic documents established by the colonial administration. It shows the displacement and disappearance of settlements formerly mentioned along the old trails. For example, a significant number of villages that were earlier to the north of the Sesan were moved south, or no longer exist. But, on the whole, the spatial distribution of the ethnic groups has scarcely changed. The ethno-linguistic map of the French administrator is also the latest to date, because no subsequent map was as detailed, comprised only of fragments inserted into larger scales.[26] The topographic surveys methodically conducted by the US Department of defense in 1972, and then the Vietnamese surveys done together with the Russians, mention village names, but neither their size nor ethnic adherence. At present, the spatial distribution and the human density and location of ethnic groups is clearly unequal. The numeric importance of the groups varies greatly because some consist of just a handful (Lun, Phnong, Chinese), while others number over 10,000 (Tampuan, Jorai, Kreung).

Several points deserve comment. The geographic distribution according to population density is greatly unequal. The interfluvial zone, and more particularly the plateau that extends to the Vietnamese border, contains nearly the entire population. South of the Srae Pok River, which corresponds to what Henri Maître called "the sparsely-wooded desert", is completely uninhabited, with the exception of a few Laotian villages along

the river. At the other extremity, to the north of the Sesame, where the altitude increases in the direction of Laos, human settlement is also negligible. The mountainous country is of difficult access beyond the river biotope, but next to nothing is known about the population in the dense forest zones. It is however likely that the hyper-endemism of malaria in its most pernicious forms (*falciparum*) reduces the chances of large settlement there. It is not impossible that there would be (or would have been) a few isolated hamlets located on the borders of the country. In Kachah villages we visited north of the Sesan, the people mentioned the existence of the mysterious Bailenvin (Boloven?), a nomadic ethnic group known for its supernatural powers who would live (would have lived) exclusively from the hunt, fishing and gathering. On the other hand, American studies made in 1962 speak of the tribe of the Halang (or Saleng)[27] localized at the intersection of Vietnam (30,000 persons), Laos (10,000) and Cambodia (figure not specified), notably in the "tail of the dragon".[28] During the Indochina war a large number of them infiltrated Cambodia prior to the advance of the Vietminh, but no additional indication would allow one to say anything about their current presence. The human massacre during this troubled period must also be recalled, a massacre that reduced the chances of their survival. The same pertains to the existence of a small group of Biet, who are specialized in capturing and domesticating elephants, in the extreme south of the country, where their former villages have now disappeared. The Burmese community, which came to settle in the Bar Kaev region when zircon, ruby and sapphire mines were proliferous, completely vanished before the 1970s.

If the four cultural groups whose existence is either long-standing or uncertain are left aside, twelve different ethnic groups can now be distinguished: eight of them are of Proto-Indo-Chinese substratum and four of Khmer, Lao Chinese and Vietnamese origin. Among the former, seven belong to the Mon-Khmer linguistic group (Tampuan, Kachah, Brao, Kreung, Lun, Phnong, and Kraveth) and one to the Malayo-Polynesian or Austronesian group (Jorai). Only the Brao – and it is a question of a village with 76 inhabitants – were the subject of a study in 1967.[29]

The Kraveth, Brao and Kreung can understand each other without great difficulty; their dialects are enriched by Lao vocabulary and exhibit undeniable similarities. Culturally, socially and physically, however, they are different. The whole of this linguistic subgroup, to which can be added the Lun, who are migrants from Stung Treng dispersed in a few villages near the border, come under the West-Bahnaric group, according to American classification. The Kraveth are the only ones to occupy the forests located on the right bank of the Sesan, without however bordering the river itself. The government planned, beginning in 1995, to bring them nearer the river, towards which they show no predilection. The establishment of the Brao on the river biotope of the upper Sesan is already long-standing, but corresponds there also to a government decision. In fact, if the villages are virtually on the banks, the cleared

grounds where the families live for three quarters of the year are several kilometers away in the deep forest. The Brao are also found in small groups in the province of Stung Treng as well as in southern Laos, from where they originate. Some inhabitants of the Bolovens in the region of Attopeu, who would be near cousins of the Brao, were able to test the solidity of filiations ties when, as refugees in the territory during the Khmer Rouge regime, they asked for their help. The Kreung live for the most part on the western edges of the plateau, between Ban Lung and Veun Sai. In some villages in the district of Lumpath (communes of Labang Moui and Labang Pi), the Kreung and the Brao have entered an alliance and affirm by the practice of intermarriage to be henceforth a single group.

The Tampuan clearly form a linguistically and culturally identifiable group. They are the largest and longest established group on the lower plateaus. They would have crossed, according to B. Bourotte, the southern Sesan River in the nineteenth century.[30] Their territory extended, until the end of the century, as far as the Vietnamese border, but they were driven back by the Jorai coming from the province of Pleiku in Vietnam. A few villages are also to be found in the provinces of Mondolkiri and Stung Treng. Those in Ratanakiri distinguish themselves as "upper Tampuan" (those living towards the Sesan) and the "lower Tampuan" (occupying the southern part of the plateau). They constitute two endogamous phratries, each of which has more contact with the geographically neighboring ethnic groups than among themselves. The Kachah, the original name of whom is Lanam, are concentrated on the banks of the upper Sesan. At the initiative of the Khmer Rouge, they adopted irrigated rice cultivation and consequently occupy the narrow plains of the fluvial basin. The Jorai, whose bellicose reputation and spirit of conquest have caused much ink to be spilt, monopolize the eastern part of the province, after having driven the Tampuan back to the centre of the interfluvial plateau. Their villages are densely populated. They represent the second largest group in Ratanakiri, although the major part of the whole ethnic group, brilliantly studied by J. Dournes, still lives in Vietnam.[31] Also to be mentioned are the small Phnong (Mnong) hamlets, probably coming from southern Mondolkiri, which are located on the upper Srae Pok. One of the original characteristics of the village composition in the district of Andoung Meas is the very strong social co-existence among the three ("upper") Tampuan, Jorai and Kachah. It would appear that spatial proximity prevails over the linguistic and socio-cultural differences that initially separated them. It is common to find a large house where the women (residence is matrilocal) have married a Jorai, a Kachah or a Tampuan. This "ethnolysing" process would make it necessary to relativize the rigorous classifications instituted in our surveys if these marriage relations were not circumscribed in a limited zone containing hardly more than 15 villages.[32]

The establishment of Laotians first in Stung Treng and then in Ratanakiri goes back more than 300 years. They conducted themselves less as conquerors or invaders than as

colonists settling in successive waves along the Mekong and its affluent the Sekong, to then arrive in Ratanakiri on the banks of the Sesan and the Srae Pok. While the first migrants were probably adventurers/traders versed in the trafficking of slaves and other negotiable goods (valuable wood, gold, ivory, etc.), their successors were above all peasants and fishermen in search of new arable land and fish-stocked rivers. The Laotians promoted the development of irrigated rice cultivation, until then unknown in the province. In the course of the two last centuries, they either founded their own villages or assimilated those of the tribal populations located on the fluvial basins.[33] A smooth intermingling without proselytization took place and many single men – originally having come to work in the mines – married and started their own line; they subsequently considered their relatives to be Laotians and founded their own settlement, for example, *phum* Talao on the right bank of the upper Sesan. This assimilation was in certain respects reciprocal because a number of them learned the vernacular language (Brao, Tampuan and Jorai) and adopted new ways of life: participation in ritual ceremonies, learning of techniques to procure forest resources, etc.

Apart from the irregular arrival of a few traders, the establishment of the Chinese is more recent and less scattered. The wave of immigrants left China at the beginning of the Cultural Revolution and founded a small community named Thmeï Chen *phum* west of Veun Sai. The latter controlled a major part of the trade with the surrounding villages (Kraveth, Brao, Kreung and Kachah). A second, constantly increasing wave is settling in the provincial capital, attracted by the prospects of the opening of the region, the possibility of starting a prosperous business and land speculation. They come either from southern Cambodia or directly from their country and live for the most part in Ban Lung. They remain a relatively closed community, living mainly from small businesses, trades (masons, goldsmiths) or as wage-earners in the hevea plantation (tappers, factory workers).

Although the relation of the Khmers with the province is, as we have seen, very old, their lasting establishment is more recent. There are in fact few who, like the Laotians, adapt themselves to the difficult living conditions and show an intention to become integrated into the local populations. When the state plantation was created in the 1960s, a few poor families from the provinces of Takeo, Svay Rieng and Phnom Penh accepted without great enthusiasm to migrate with the encouragement of the government. The latter relied heavily on them so as to "Khmerize" the inhabitants. This attempt came to grief as it encountered a lack of interest and the never-ending fear of living in a forest milieu dominated by spirits and "primitives". Finally, only the western plain was colonized by the Khmers when, leaving the plantation with the intention of returning to their region of origin, they discovered the vast agricultural potential of the area they were crossing: since then, the district of Kun Mum is to a large extent a Khmer district with a few Laotian enclaves. However, the migration process has

become more pronounced throughout the district in the last few years: whether for government jobs, trade/trafficking with Vietnam, or agriculture. Age-old distrust thus tends to lessen due to access facilities (boat, road and airplane), the creation of a hospital and the calming security that prevails in the country.

This brief panorama of the spatial habitation of Ratanakiri shows the heterogeneous character of human establishment in a territory with greatly contrasting relief. In the course of the last three decades, a slight movement of the tribal populations to certain favored areas – central plateau and river banks –, in distinction to a formerly more dispersed settlement, is to be observed, if reference is made to the old maps. This centripetal movement leads to the adoption of a semi-sedentary lifestyle that contrasts with the traditional forms of territorial occupation characterized by a periodic shifting of settlement sites (every ten to twelve years on average). This change is to the large part imposed by the authorities, who hope to control and develop the riches of the indigenous region in which hard-wood essences, rare kinds of wood and a multitude of varied forest products abound.

The embryonic development policy meant that groups of villages were established along the axes of communication. It thus entailed a number of separations, such as J. Matras noted regarding the village he studied; it was divided into several small hamlets subsequent to the appropriation of land by the plantation. At the same time during the nineteenth century, several villages, although they had remained quite independent, were gathered into a single large fortified town for reasons of defense. When the situation improved and the skirmishes with slave traders had abated, a few separated again, but others remained united (south of Bar Kaev, Ou Chum).

While the settlement is theoretically grouped together, the families are scattered in their respective cleared grounds and live in a house/loft located in the middle of the field during the major part of the agricultural cycle. The average size of a village is 274 inhabitants, with slightly more women (139 against 135). It is however common to encounter villages with more than 450 inhabitants (maximum: 841 inhabitants), which is enormous for a ground-clearing population.

Moreover, the considerable disproportion of density ratios of the diverse dialectal groups has direct implications for the use of the environment: individual family management, but on a collective plot among the Kraveth and most of the Brao, whose villages do not exceed 200 persons; family management or according to lineage membership, but on isolated plots among the Tampuan and Jorai, whose settlement is often more condensed.

The total density ratio is deceptive because more than half the territory is still uninhabited, which results in a population density of more than eleven inhabitants per square kilometer of a space that includes the narrow river biotope and the low-altitude central zone. The ratio must therefore be weighted according to the local ecological characteristics because the tribal populations view numerous parts of the territory as unsuitable for settlement:[34] sparsely wooded areas and savannahs, sacred sites inhabited by forest spirits, etc. Notwithstanding the importance of local variations, the density ratio in Ratanakiri is very clearly higher than the demographic density of the Amazonian forest horticulturists, ranging from 0.17 to 3 inhabitants per square kilometer. It is lower than that of the over-populated provinces of the upper plateaus in central Vietnam and northern Thailand – the Chiang Maï region - of which the critical (and optimistic) threshold of fifty inhabitants per square kilometer for ground-clearing societies is often exceeded. It is, on the other hand, more or less similar to the population density of the Boloven plateau in Laos, where the rich fersiallitic soils, like those in Ratanakiri, allow of concentrations that are as high as sixteen inhabitants per square kilometer (as opposed to less than ten on other wooded plateaus in southern Laos).

The modification of the classical "round" or "square" configuration of villages that have a tendency to be aligned with the roadsides is a characteristic feature of those near the provincial capital and those that were moved to the river biotope. The new form of settlement based on the Khmer model is not without consequences, for it introduces both a sedentary lifestyle (but not completely) and a change in the conception of relations between the social and natural environments. In fact, the village in its traditional form is a reflection of the world order on which both the socio-territorial organization of houses and the distribution of cleared grounds in the village area are based. Claude Levi-Strauss has shown how the missionaries in Latin America knew to change village plans so as to modify the internal social structures and the villagers' cosmological representations[35] and make them more malleable in terms of evangelization and "modernization" processes. It would appear that a similar effect is taking place under cover of the development and regionalization of Ratanakiri.

In search of a compromise

The apparent balance between the tribal and non-tribal populations is precarious and is more concerned with their respective settlement strategies – some preferring the heart of the forest and others the plains and fluvial basins – than with their will to live together. For the present, the channels of interpenetration are weak and mainly limited to axes suitable to motor vehicles where the Khmer intermittently set up small businesses. A certain reciprocal distrust, linked to the contingencies of history, limit the relations to barter transactions. And, for the present, the autochthonous peoples are perceived as good people from whom one can purchase inexpensively everything the land produces. Some, like the Kachah, have nevertheless established structured trade networks and clearly announce their intention and ability to enter into the market economy. This takes place on the basis of their own will and it this that constitutes their strength and success.

The government foresees the establishment of 20,000 Khmer peasants in Ratanakiri in the decade to come. One is justified in asking to what extent this alien pressure, in addition to the spontaneous flow of Chinese and Sino-Cambodian migrant investors, will lead to territorial encroachment and disrupt the reasoned management of natural resources. Traditional management dictated by an undeniable knowledge of the local ecosystems rests primarily on a judicious distribution of the villages, each of which has its own space wherein all the familial cleared grounds are scattered. By upsetting this vernacular division of space, by reducing the areas of each village, the system of slash-and-burn cultivation can no longer be viable. The concentration of cultivated areas implies the reduction of the period of forest re-growth and threatens to be the immediate consequence of the nucleation of settlement zones and of the definitive adoption of a sedentary lifestyle.[36] The techniques for using nature are adapted to the particularities of a certain biotope and there is a risk that this will no longer be so when the population conditions and the possibilities of periodic shifting change. The strategies of private investors for acquiring tracts of land traditionally used by the autochthonous groups significantly testify to this underlying evolution.

The political choice in the matter of development will decide the fate of the local populations, now paradoxically called "minorities", they who always constituted the majority of the population in Ratanakiri. Rather than indiscriminately forcing them to radically change their living conditions, it would be well to include their participation in the projects that concern them. Without confining them to a utopian isolationism, it would be advisable to proceed with prudence in the transformations to be brought about. Before vitiating the knowledge of the ground-clearers and the manner in which they conceive of and manage to domesticate nature, it becomes urgent to inventory the knowledge they have amassed. The understanding of the socio-cultural logics that underlie their territorial organization and their cultivation practices can also prove to be an original lesson in human ecology, the pertinence of which is to be verified.

Notes

1 In the subsequent text we will employ the terms of autochthonous, aboriginal or tribal populations to designate the social groups traditionally living in the highlands and practising itinerant slash-and-burn cultivation, in distinction to the people in the plains (Laotians, Vietnamese, Chinese, Khmers) practising pluvial or irrigated rice cultivation and mixed farming in the form of gardens (*chamcar*) on the river banks.

2 The present demarcation of the province dates from 1953. For the sake of convenience, we will designate with Ratanakiri the former territory, the boundaries of which fluctuated, and continue to do so with respect to Vietnam.

3 Signifies Highland Khmers.

4 R Prud'Homme, *L'économie du Cambodge*, Paris, 1969, PUF, p.50.

5 J. Dournes, *Pötao, une théorie du pouvoir chez les Indochinois Jörai*, Paris, 1977, 362 pp.

6 K. Sok, *Le Cambodge entre le Siam et le Vietnam*, Paris, Ecole Française d'Extrême-oreint, pp. 232 sq.

7 G. Janneau, *Manuel pratique*, p. 59, cited by K.Sok., *op.cit*., p. 233.

8 G. Janneau, *op.cit*., p. 59.

9 A person indebted to another must work for his creditor, who becomes his master until the debt has been entirely reimbursed.

10 J. Matras-Troubetzkoy, *Un village en forêt*, Paris, 1983, SELAF, p. 41.

11 P. Levy, "Thala Borivat ou Stun Tren", Journal Asiatique, 1970, pp. 113-119.

12 Ch. Meyer, "Les nouvelles provinces; Ratanakiri-Mondolkiri", Revue Monde en développement, Paris, 1979, p. 684.

13 Father Combe among the Bahnar tribe; Father Dourisbourne among the Sedang. Finally, Father Guerlach, who was one of the founders of the Kontum Mission in 1882, in Vietnam, and who worked among the Jorai, Hodrung and Sedang.

14 P. Cupet, "Voyages au Laos et chez les sauvages du Sud-est de l'Indochine", *in* Mission Pavie Indochine, 1879-1895, Géographie et Voyages, III, Paris, 1900, Leroux, 428 pp.

15 S. Chhak, *Les frontières du Cambodge*, Paris, 1966, Dalloz.

16 J. Taupin, *Huit jours en Pays des Braous*, Saigon, 1888; (Compte-rendu de) P. Neis, *Exploration chez les sauvages de l'Indochine*, Paris, 1883.

17 H. Maître, *Les Jungles Moï, Mission Henri Maître (1909-1911)*, 1911, Paris, 578 pp.

18 The plantation, created in 1960 in Labansiek, was to reach 2 200 hectares. The aim, thwarted by the war, was to double the area by encouraging small family plantations between Ban Lung and Borkeo.

19 Such a mistake was mentioned in Vietnam by G. Condominas, *L'exotique est quotidien*, Paris, 1965, pp. 480-484.

20 The buffalo sacrifice represents the culminating point in Proto-Indo-Chinese religion.

21 For example, the statements that Pol Pot always had tribal body guards, that the gaolers in Sihanouk's palace were also tribals. Historico-romanesque literature contributes indirectly to forming this view. Cf. L. Durand, *Jorai*, Paris, 1991, Poche.

22 Cf. G. Condominas 1965, *op.cit.*, pp. 457-484.

23 Refugees from camps in Thailand, some of whom have been gone for twenty years, still continue to return and settle in 1994-1995.

24 Information was obtained either directly or from *phum* (village) and *khum* (commune) leaders, or from those responsible for education in each district who update annually the number of inhabitants in their jurisdiction.

25 P. Cupet, *op.cit*.

26 That established by J. Delvert in 1960, although including Cambodia as a whole, is of little utility; the only groups mentioned , most often inexact in terms of region, are the Lao, Tampuan, Jorai, Kraveth and, strangely, the Burmese (of whom at the time there were only a handful).

27 Some authors relate them to the Sedang subgroup living in the upper plateaux of Vietnam. The Halang inhabited the banks of the Sésan in the eighteenth century but were driven farther north by Jorai warriors in the next century. See B. Bourotte, *Essai d'histoire des populations montagnardes*, Paris, 1955.

28 Name designating the extreme north-east of the province because of its evocative form.

29 J. Matras, *op. cit*.

30 B. Bourotte, *op. cit*., pp. 1- 116.

31 In 1966, there were more than 150 000, divided into two subgroups: the Hodrung and the Jorai, proper.

32 The group and forced marriages under Pol Pot have perhaps contributed to this phenomenon.

33 In the 1950s, P. Bitard observed that the Laotians had a tendency to settle in proximity of aboriginal populations, or even in Brao and Kreung villages. Likewise, it is not seldom that one meets in 1995 Laotian "*kru*" (healers) initiated in their art in the pagodas of the province and established in Jorai or Tampuan villages.

34 F. Bourdier, *Représentation et socialisation de la nature*, Bordeaux, 1995.

35 Cl. Levi-Strauss, *Anthropologie structurale*, Paris, 1966, Plon.

36 In order to facilitate formal education and accessibility to healthcare structures and to the district markets.

CHAPTER 8

The Uncertain Future of the Populations of the North-East

The indigenous population - also called highlanders - is composed of different ethnic groups who live mostly in the north-eastern part of the country. They have been living in the remote hilly forests for centuries, while Lao, Khmer and Chinese have more recently settled along the rivers and the highlands of the two northern provinces. It is worth mentioning that the term "minority" appears irrelevant, in the sense that in Ratanakiri and Mondolkiri they constitute a large majority of the total population (70% in the former and 80% in the latter province). They must therefore be regarded more as a majority then a minority in these areas.

The term "highlanders" implies a group identity which does not exist in reality. Above the village unit - whose average population is about 200 people - there is no collective form of socio-political organization, notwithstanding the mutual recognition between villages belonging to the same group or to different ones. Distinct ethnic groups make up the total highlander population, and membership in one of these groups defines the individual indigenous ethnic identity.

Thirteen ethnic groups with their own distinct languages can be identified. Except for the Jorai, who derive from the Malayo-Polynesian linguistic family, the others belong to the Môn-Khmer family. Most of them have a common origin. In the course of time, each of them has developed its own peculiarity, which permits it to define its identity by observable facts and figures (cultural pattern, crafts, ceremonies, specific features, etc.). However, these groups still share a similar belief system and agricultural practices, even if some families today shift to lowland rice cultivation and are likely to adapt themselves to the "Khmer way of life".

The highlanders have preferably established their homes and villages in the red basaltic land of the central plateau, where they have cultivated an astonishing number of different varieties of hill rice and other crops, grazed their livestock, hunted, fished and gathered various forest products. Their way of life is founded on the recognition of the interdependence between themselves, their environment and their relation to the spirits and the supernatural forces they believe to inhabit their surroundings.

Highlander communities should not be considered in terms of uniform, static and unorganized societies. They have their own history, traced by migrations, wars and co-existence, exchange and more or less turbulent relations with outside groups like the Cham, the Lao, the Thai and the French. The contact with the Khmer is quite recent, if we except some precursors who dared to penetrate the region for slave trade, from the Angkor period onwards to the nineteenth century. In fact, it was during the Sangkum period that the Cambodian government implemented for the first time a number of national development policies, but unfortunately without any negotiation with the

local populations. The intention was to civilize and "Khmerize" the people of the forest, who were supposed to be ignorant, superstitious, unable to manage themselves and "savage".

Of course, this appears to be completely false. Rules of conduct and behaviors are numerous and the socio-economic organization, mostly determined by kinship networks and clan or lineage membership, confer on the village an elaborate framework. Villages function according to customary notions of obligations to the ancestors and to the family, and of respect towards the spiritual forces inhabiting the environment. Such a customary law, stewarded by elders, means that the spiritual forces have the power to intervene in human affairs and can afflict the well-being of the family, the group or the whole village if duties and ceremonies have not being properly conducted "according to tradition". This spiritual sphere, which acts as a reference and a cocoon around the living place, must not be perceived has a mere superstitious set of beliefs -such as those found in a Khmer village -, but as a pattern of sensitivity that lends a *deep meaning* to human life, even if the purpose of most of the religious festivities is to ward off the malevolent spirits who roam in the living area. Simultaneously, various kinds of supernatural forces act as "protectors" of the forest: some areas are not allowed to be cut or used in any way by the villagers. Some plants and a few special trees, supposed to be the domain of the divinities, are also restricted from any use. These relations with the supernatural forces provide a traditional system of protection for the ecosystem and therefore prevent untimely and uncontrolled access to the local resources.

For ages, the highlanders have learned, through observation and experience, how to cope with their ecological environment. Accordingly, their vernacular knowledge regarding nature is not only vast and complex but effective, in the sense that, contrary to what the Cambodian people think, they have not destroyed the forest by adopting slash-and-burn cultivation. This kind of practice means that the forest is temporarily cut: the land is cultivated from three to five years (according to its quality) and thereafter trees grow again. The forest regeneration will take fifteen to twenty years and only after this period will the highlanders be able to work again on this land. This system can be sustainable insofar as there is no demographic pressure and the fallow is respected.

Today, however, an increase in the population is to be observed in some areas: for example, some big villages can count as many as 700 inhabitants, a density that is traditionally unusual. One reason is an increased monopolization of the red fertile land in Ratanakiri by the new migrants (Khmer, Sino-Cambodians). The result is that the highlanders face land pressure and, consequently, tend to increase the duration of cultivation and shorten the traditional period of adjustment that allows of a proper reforestation.

It is commonly heard among the Khmer that the highlanders face regular problems in terms of hunger, poverty, disease and, more generally, deprivation. In fact, their traditional agricultural system does not verify this drastic statement. Precise calculations

demonstrate that the yield for dry rice (on basaltic soil) is above one ton per hectare, and can reach twice that amount or even more. Although a village may exhibit socio-economic disparities despite a mutual aid system, a good amount of families have a regular surplus of crops - including rice and vegetables - they can sell or exchange on the district markets.

As for health, it is true that villagers suffer from serious diseases in this area, where there is a high prevalence of malaria. But this does not mean they have no knowledge regarding health practices. The traditional remedies made up of plants, roots, leaves and barks are thus very useful, and the magico-religious therapeutic ceremonies have positive social and psychological effects, whenever modern medicine is not available or not sufficient to enable of recovery from biological and social disorders.

Today, the indigenous people, who still live over a wide and scattered area, must face a number of unprecedented changes. These transformations take form in the context of the increasing influence of the market economy and the rapid exploitation of the upland areas for commercial purposes. Government policies implicitly support these changes and encourage the "Khmerization" of the highlanders by shifting their villages nearer roads, making them practice settled agriculture and trying to integrate them into the modern market economy (an insertion with which some of them cope quite well). These changes pose severe problems for the future subsistence, security and autonomy of the local communities. If we add the exponential increase of migrants, who take advantage of the lack of strict regulations regarding land access and who do not hesitate to unscrupulously acquire, sometimes illegally with bogus documents, the forest traditionally used by the highlanders, we can presume that many aspects of indigenous culture, knowledge and wealth are seriously threatened if nothing is done *very quickly* to protect the rights of these people.

The most drastic change through the expropriation of forest lands by private commercial interests has already begun. This trend is followed by the government of Phnom Penh as well: recently, the major part of the forested areas in Ratanakiri and Mondolkiri was given to an Indonesian company having poor forest management experience. We may wonder about the future of the 50,000 to 60,000 highlanders who are living in this zone granted to outsiders. It seems astounding that the concerned populations have never been consulted and, even today, have not yet been informed about this so-called forest development project, which is no less than sheer robbery of their traditional land.

If such a thing happens, Ratanakiri - today a peaceful and lovely province - will face a dramatic social and ecological crisis. Not only will some of the most wonderful primary and secondary forests be destroyed by logging, but the inter-ethnic relations between Khmer and highlanders will be greatly distorted. The present problematic situation in this part of Cambodia needs to be discussed and debated by various specialists working together and, more importantly, along with the local population.

The critical position of the indigenous people has until now been compounded by the fact that their legal rights have not been clarified. They have not yet been recognized as citizens of Cambodia, although it is expected that this will shortly take place through their categorization as "Khmer Loeu". But, this absence of legal status has until now prevented them from receiving "official" legal land rights.

A number of measures must be implemented to protect the basic rights of the local people, of which we will cite here only the three most important and urgent. First, they need *citizenship recognition with a special status, acknowledging them as an indigenous population of the land they have historically occupied*, stipulating a particular relationship to their environment. If not, it is likely they will be given individual land rights on a par with Khmer citizens, without recognizing the particular form of communal land use traditionally practiced by highlanders using swidden agriculture. Yet, if they were to be recognized as the unique indigenous population of the highlands they inhabit, then negotiations could be made to ensure some recognition of their communal claims to land and the customary laws that govern much of their behavior in relation to their physical environment. Second, an urgent requirement is the establishment of a communication system through which information would be disseminated to communities allowing them to make informed choices, and a system of consultation and representation that would ensure that their voice is heard. Third, measures must be taken to create a social environment in which cultural pluralism is accepted as an integral and vital element of the modern democratic nation-state that Cambodia is supposed to become.

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